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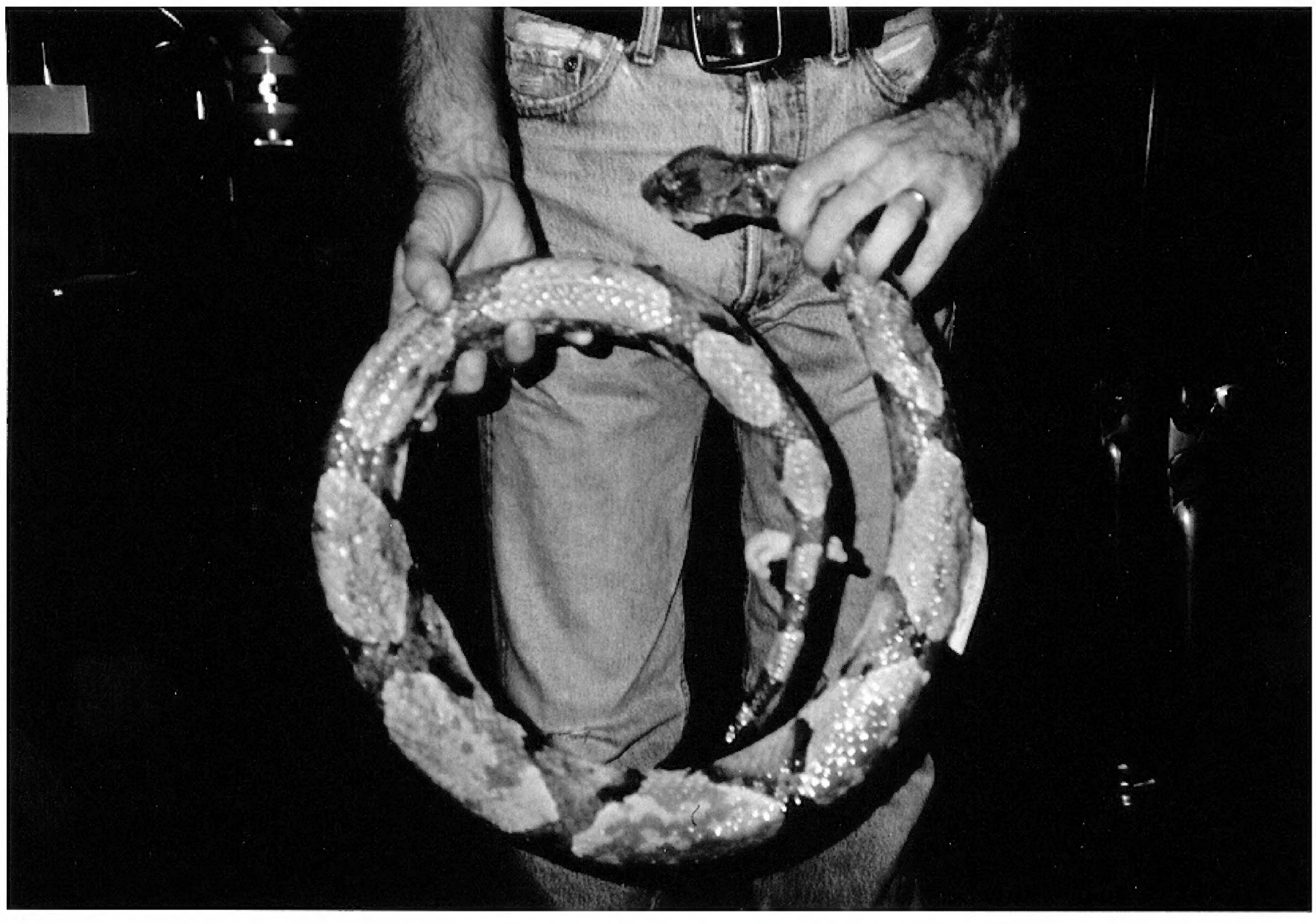

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Maximum Lengths of North American Snakes

Jeff Boundy
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Baton Rouge, LA 70803

The following list provides maximum lengths for species and subspecies of North American snakes, that is, those taxa for which specimens are known from the continental United States or Canada. Total lengths are given in millimeters, and metric conversions are based on 1″ = 25.4 mm. In each case an effort was made to trace records to their original source or earliest citation. Maximum lengths provided by Wright and Wright (1957) often appear to be estimations, and such lengths, unless reported elsewhere, have been ignored. Maximum sizes for certain taxa are unknown or have gone unreported, and in some such instances I have included the largest specimen known to me. In cases for which the particular subspecies for a record is unknown the length follows the species name. The locality from which specimens were obtained is provided when known.

A report of new records is solicited; these may be published in the *Bulletin of the Chicago Herpetological Society* or *Herpetological Review*. Such reports should be substantiated with a voucher specimen or a photograph of the specimen with a scale of reference (i.e., a hand, yardstick, etc.).

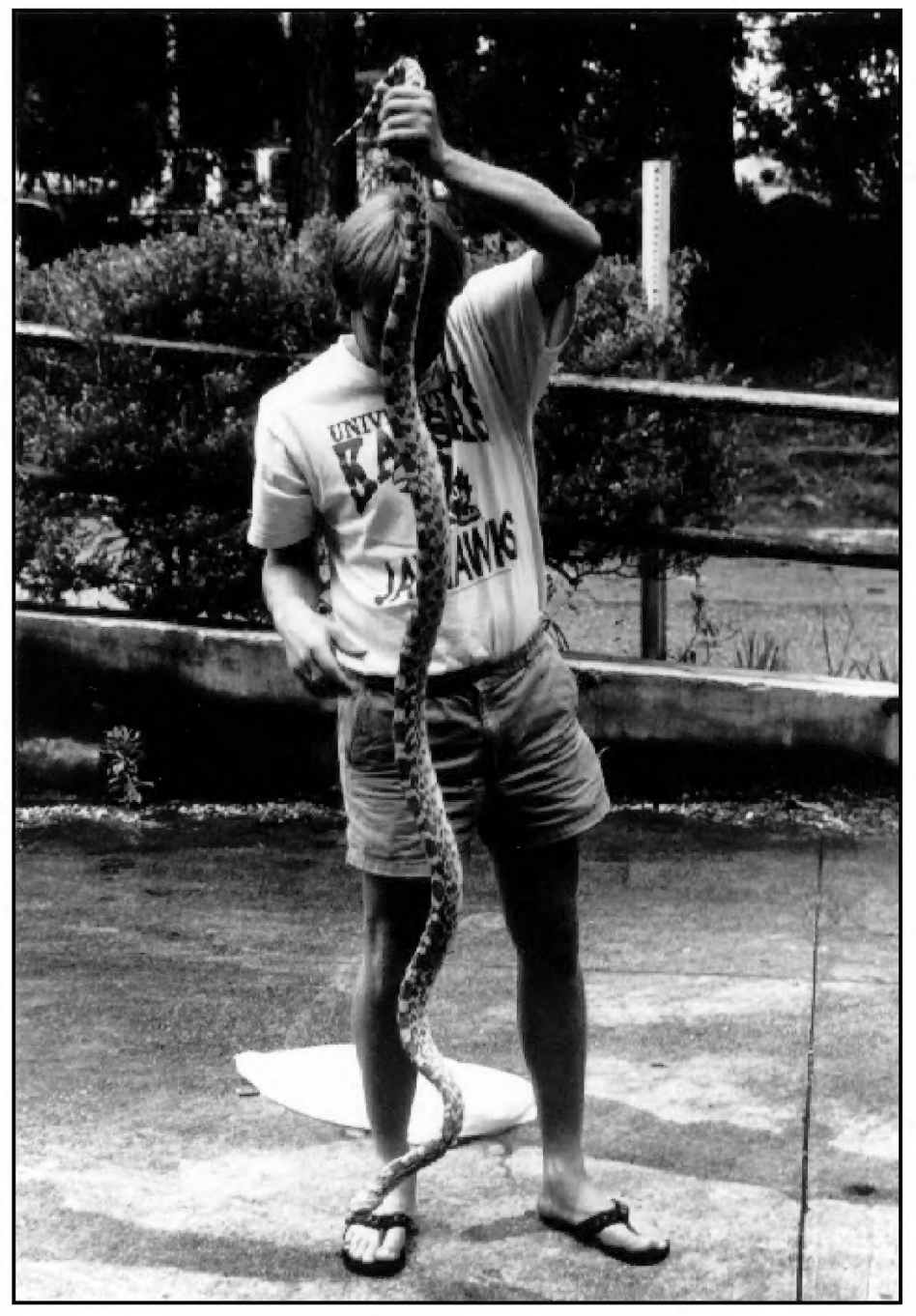
State or province abbreviations for Canada and Mexico: BCA (Baja California), BCO (British Columbia), BCS (Baja California Sur), CHI (Chihuahua), NSC (Nova Scotia), ONT (Ontario), SAS (Saskatchewan), SLP (San Luis Potosi), and SON (Sonora). Museum acronyms: CAS (California Academy of Science, San Francisco), FSM (Florida State Museum, Gainesville), KU (University of Kansas, Lawrence), LSUMZ (Louisiana State University Museum of Natural Science, Baton Rouge), MVZ (Museum of Vertebrate Zoology, Berkeley), UCSB (University of California, Santa Barbara).

I am grateful to Douglas Rossman for reviewing this manuscript, noting that some of the taxonomic arrangements presented do not reflect his views.

Species or subspecies	Total length (mm)	Source	Locality
Leptotyphlops dulcis (Texas blind snake)			
L. d. dulcis	273	Conant, 1958	
L. d. dissectus	293	Punzo, 1974	Cochise County, AZ
Leptotyphlops humilis (western blind snake)			
L. h. humilis	315	Klauber, 1940a	
L. h. cahuilae	389	Klauber, 1940a	Yuma County, AZ
L. h. segregus	339	Punzo, 1974	Cochise County, AZ
L. h. utahensis	322	Klauber, 1940a	Washington County, UT
Charina bottae (rubber boa)			
C. b. bottae	838	Hoyer, 1974	
C. b. umbratica	467	Erwin, 1974	
Lichanura trivirgata (rosy boa)			
L. t. trivirgata	——		
L. t. myriolepis	951	Klauber, 1943	southwest CA, northwest BCA
L. t. roseofusca	1118	Wright and Wright, 1957	
Arizona elegans (glossy snake)	1778	Behler and King, 1979	
A. e. elegans	1420	Conant and Collins, 1991	
A. e. arenicola	1386	Klauber, 1946	Atascosa County, TX
A. e. candida	991	JB [(1)]	San Bernardino County, CA
A. e. eburnata	1163	Klauber, 1943	San Diego County, CA
A. e. noctivaga	1055	JB [(2)]	Pima County, AZ
A. e. occidentalis	1132	Klauber, 1946	San Diego County, CA
A. e. philipi	903	Klauber, 1946	El Paso County, TX
Bogertophis rosaliae (Baja rat snake)	1510	Hunsaker, 1965	Guadalupe Canyon, BCA
Bogertophis subocularis (Trans-Pecos rat snake)			
B. s. subocularis	~1680	Dowling, 1957	Terrell County, TX
Carphophis amoenus (worm snake)			
C. a. amoenus	342	Klemens, 1993	CT
C. a. helenae	324	Conant, 1938	OH

Species or subspecies	Total length (mm)	Source	Locality
C. a. vermis	391	Conant and Collins, 1991	
Cemophora coccinea (scarlet snake)			
C. c. coccinea	823	Neill, 1951 [3]	Marion County, FL
C. c. copei	665	Brandner, 1981	Burlington County, NJ
C. c. lineri	660	Tennant, 1984	
Chilomeniscus cinctus (banded sand snake)	285	Hensley, 1950	Pima County, AZ
Chionactis occipitalis (western shovel-nosed snake)			
C. o. occipitalis	369	Klauber, 1951	
C. o. annulata	447+	Funk, 1967	Yuma County, AZ
C. o. klauberi	339	Klauber, 1951	
C. o. talpina	340	Klauber, 1951	Esmeralda County, NV
Chionactis palarostris (Sonoran shovel-nosed snake)			
C. p. organica	432	Stebbins, 1985	
Chionactis saxatilis (Gila Mountains shovel-nosed snake)	348	Funk, 1967	Yuma County, AZ
Clonophis kirtlandi (Kirtland's snake)	622	Conant, 1975	
Coluber constrictor (American racer)			
C. c. constrictor	1905	Auffenburg, 1955	Hartford County, CT
C. c. anthicus	1778	Conant, 1958	
C. c. etheridgei	1216	Wilson, 1970b	Polk County, TX
C. c. flaviventris	1778	Ortenburger, 1928	
C. c. foxi	1829	Conant, 1958	

A 50″ copperhead (*Agkistrodon contortrix*) in the Louisiana State University Museum of Natural Science collection, killed in Zachary, East Baton Rouge Parish, Louisiana, April 1983.



Dr. Joseph B. Slowinski with a 7′2″ bullsnake (*Pituophis catenifer*) collected in Val Verde County, Texas, June 1993, by N. Nevid and A. Meier.

Species or subspecies	Total length (mm)	Source	Locality
C. c. helvigularis	—		
C. c. latrunculus	—		
C. c. mormon	1099	KU 16712 [4]	Bannock County, ID
C. c. oaxaca	1016	Conant, 1958	
C. c. paludicola	1689	Auffenburg, 1955	
C. c. priapus	1651	Minton, 1972	Floyd County, IN
Coniophanes imperialis (black-striped snake)			
C. i. imperialis	508	Conant, 1958	
Contia tenuis (sharp-tailed snake)	483	Behler and King, 1979	
Diadophis punctatus (ringneck snake)			
D. p. punctatus	482	Marion and Nowak, 1985	Jefferson County, AL
D. p. acricus	289	Paulson, 1968	Monroe County, FL
D. p. amabilis	532	Boundy and Balgooyen, 1988	Santa Clara County, CA
D. p. arnyi	477	Powell et al., 1990	Holt County, MO
D. p. edwardsi	706	Freeman and Freeman, 1982	Monroe County, TN
D. p. modestus	610	Cunningham, 1959	
D. p. occidentalis	~600	Darling, 1947	OR
D. p. pulchellus	475	Blanchard, 1942	Mariposa County, CA
D. p. regalis	857	Boundy and Balgooyen, 1988	Cochise County, AZ
D. p. similis	524	Blanchard, 1942	Sa. S. Pedro Martir, BCA
D. p. stictogenys	457	Tennant, 1984	
D. p. vandenburghi	578	UCSB [5]	Los Angeles County, CA
Drymarchon corais (indigo snake)			
D. c. couperi	2629	Conant, 1958	
D. c. erebennus	2546	Conant, 1975	
Drymobius margaritiferus (speckled racer)			
D. m. margaritiferus	1339	Werler, 1949	Mexico
Elaphe bairdi (Baird's rat snake)	1575	Brecke et al., 1976	Val Verde County, TX
Elaphe guttata (corn snake)			
E. g. guttata	1829+	Ditmars, 1936	SC
E. g. emoryi	1530	Conant, 1975	
E. g. meahllmorum	—		
Elaphe obsoleta (common rat snake)			
E. o. obsoleta	2565	Ditmars, 1931	Sullivan County, NY

A 45″ Sierra garter snake (*Thamnophis couchii*) photographed September 1991 in Kennedy Meadow, Tulare County, California.

Record length Chihuahuan hook-nosed snake (*Gyalopion canum*) photographed in Big Bend National Park, Brewster County, Texas, in June 1981 by J. Boundy and W. Meyers.

Species or subspecies	Total length (mm)	Source	Locality
E. o. lindheimeri	2184	Thomas and Friloux, 1983	Jefferson Parish, LA
E. o. quadrivittata	2210	Conant and Collins, 1991	
E. o. rossalleni	2210	Conant, 1958	
E. o. spiloides	2140	Conant, 1975	
Elaphe vulpina (fox snake)	1791	Conant, 1975	
E. v. vulpina	1550	Oldfield and Moriarty, 1994	Goodhue County, MN
E. v. gloydi	1705	Conant, 1965	Erie County, OH
Farancia abacura (mud snake)			
F. a. abacura	2070	Conant and Collins, 1991	
F. a. reinwardtii	1880	Guidry, 1953	southeast TX
Farancia erytrogramma (rainbow snake)			
F. e. erytrogramma	1733	Mitchell, 1994	VA
F. e. seminola	1312	Neill, 1964	Glades County, FL
Ficimia streckeri (South Texas hook-nosed snake)	483	Taylor, 1949	Xilitla, SLP
Gyalopion canum (Chihuahuan hook-nosed snake)	384	Boundy and Balgooyen, 1988	Brewster County, TX
G. quadrangulare (thornscrub hook-nosed snake)	~354	Hardy, 1975	
Heterodon nasicus (western hognose snake)	1006	Conant and Collins, 1991	
H. n. nasicus	918	Collins, 1993	Morton County, KS
H. n. gloydi	—		
H. n. kennerlyi	656	Werler, 1951	Starr County, TX
Heterodon platirhinos (eastern hognose snake)	1155	Platt, 1969 [6]	Beaver County, OK
Heterodon simus (southern hognose snake)	610	Conant, 1958	
Hypsiglena ochrorhyncha (spotted night snake)			
H. o. chlorophaea	598	Boundy and Balgooyen, 1988	Ortiz, SON
H. o. deserticola	642	Tanner, 1944	
H. o. jani	581	Tanner, 1944	San Luis Potosí, SLP
H. o. klauberi	433	Boundy and Balgooyen, 1988	San Diego County, CA
H. o. lorealus	502	Tanner, 1944	
H. o. nuchalata	~474	JB [7]	Kern County, CA
Lampropeltis alterna (gray-banded kingsnake)	1467	Tennant, 1984	Edwards County, TX
Lampropeltis calligaster (yellow-bellied kingsnake)			
L. c. calligaster	1422	Tennant, 1984	Dallas County, TX
L. c. occipitolineata	—		
L. c. rhombomaculata	1194	Conant, 1975	
Lampropeltis getula (common kingsnake)			
L. g. getula	2083	Conant, 1958	
L. g. californiae	1422	JB [8]	San Benito County, CA
L. g. floridana	1956	Wright and Wright, 1957	
L. g. holbrooki	1829	Conant, 1975	
L. g. nigra	1473	Conant, 1975	
L. g. nigrita	1170	Neitman, 1980	
L. g. splendida	1524	Wright and Wright, 1957	
L. g. sticticeps	1765	Lazell and Musick, 1973	Hyde County, NC
Lampropeltis pyromelana (Sonoran mountain kingsnake)			
L. p. pyromelana	1088	Boundy and Balgooyen, 1988	Pima County, AZ
L. p. infralabialis	805	Blanchard, 1921	UT
L. p. woodini	1067	Blanchard, 1921	Cochise County, AZ
Lampropeltis triangulum (milk snake)			
L. t. triangulum	1321	Conant, 1975	
L. t. amaura	787	Conant, 1975	

Species or subspecies	Total length (mm)	Source	Locality
L. t. annulata	1054	Tennant, 1984	Live Oak County, TX
L. t. celaenops	641	Tennant, 1984	
L. t. elapsoides	686	Conant, 1958	
L. t. gentilis	914	Wright and Wright, 1957	
L. t. multistriata	850	Williams, 1978	
L. t. syspila	1067	Conant, 1958	
L. t. taylori	719	Williams, 1978	
Lampropeltis zonata (California mountain kingsnake)			
L. z. zonata	973	CAS 36062	Siskiyou County, CA
L. z. multicincta	1175	McKeown, 1991	Fresno County, CA
L. z. multifasciata	903	UCSB 16066	Ventura County, CA
L. z. parvirubra	919	Blanchard, 1921	Los Angeles County, CA
L. z. pulchra	646	Zweifel, 1952	Los Angeles County, CA
Leptodeira septentrionalis (northern cat-eyed snake)			
L. s. septentrionalis	985	Duellman, 1958	
Masticophis bilineatus (Sonoran whipsnake)	~1700	Ortenburger, 1928	Cochise County, AZ
Masticophis flagellum (coachwhip)			
M. f. flagellum	~2591	Barbour, 1919	Broward County, FL
M. f. cingulum	1850	Wilson, 1970a	
M. f. fuliginosus	1845+	Ortenburger, 1928	Miraflores, BCS
M. f. lineatulus	1650	Wilson, 1970a	
M. f. piceus	1728+	Ortenburger, 1928	
M. f. ruddocki	1710	Brattstrom and Warren, 1953	
M. f. testaceus	2032	Conant, 1958	
Masticophis lateralis (striped racer)			
M. l. lateralis	1524	Wright and Wright, 1957	
M. l. euryxanthus	—		
Masticophis schotti (Schott's whipsnake)			
M. s. schotti	1676	Conant, 1958	
M. s. ruthveni	1680	Ortenburger, 1923	Cameron County, TX
Masticophis taeniatus (striped whipsnake)			
M. t. taeniatus	1652	Boundy and Balgooyen, 1988	Siskiyou County, CA
M. t. ornatus	1829	Conant, 1958	
Nerodia clarkii (salt marsh snake)			
N. c. clarkii	914	Conant, 1958	
N. c. compressicauda	933	Conant, 1958	
N. c. taeniata	609	Conant and Collins, 1991	
Nerodia cyclopion (Mississippi green water snake)	1295	Tennant, 1984	Galveston County, TX
Nerodia erythrogaster (plain-bellied water snake)			
N. e. erythrogaster	1575	Conant, 1958	
N. e. flavigaster	1499	Conant and Collins, 1991	
N. e. neglecta	1415	Minton, 1972	IN
N. e. transversa	1473	Conant, 1958	
Nerodia fasciata (banded water snake)			
N. f. fasciata	1524	Conant, 1958	
N. f. confluens	1145	Conant, 1958	
N. f. pictiventris	1588	Conant, 1958	
Nerodia floridana (Florida green water snake)	1880	Conant, 1958	
Nerodia harteri (Brazos water snake)	902	Trapido, 1941	Palo Pinto County, TX
Nerodia paucimaculata (Concho water snake)	—		

Species or subspecies	Total length (mm)	Source	Locality
Nerodia rhombifer (diamondback water snake)			
N. r. rhombifer	~1753	Betz, 1963	
Nerodia sipedon (common water snake)			
N. s. sipedon	1405	Conant and Collins, 1991	
N. s. insularum	1264	Thomas, 1949	Lake Erie, ONT
N. s. pleuralis	1500	Conant and Collins, 1991	
N. s. williamengelsi	1224	Conant and Lazell, 1973	Hyde County, NC
Nerodia taxispilota (brown water snake)	1766	Conant and Collins, 1991	
Opheodrys aestivus (rough green snake)			
O. a. aestivus	947	Mitchell, 1994	VA
O. a. carinatus	1160	Allen and Slatten, 1945	Monroe County, FL
O. a. majalis	877	Collins, 1982	Elk County, KS
Opheodrys vernalis (smooth green snake)			
O. v. vernalis	797	Lazell, 1976	Dukes County, MA
O. v. blanchardi	565	Smith, 1961	IL
O. v. borealis	449	Gilhen, 1984	NSC
Oxybelis aeneus (brown vine snake)	~1974	Keiser, 1974	Corn Is., Nicaragua
Phyllorhynchus browni (saddled leaf-nosed snake)			
P. b. browni	508	Stebbins, 1966	
P. b. lucidus	—		
Phyllorhynchus decurtatus (spotted leaf-nosed snake)			
P. d. nubilis	408	Klauber, 1940c	
P. d. perkinsi	510	Klauber, 1943	San Diego County, CA
Pituophis catenifer (gopher snake)			
P. c. catenifer	1905	Boundy and Balgooyen, 1988	Merced County, CA
P. c. affinis	2337	Conant, 1975	
P. c. annectens	1862	Klauber, 1947	
P. c. deserticola	1854	Klauber, 1947	Coconino County, AZ
P. c. pumilis	813	Behler and King, 1979	
P. c. sayi	2743	Dixon, 1952	Brown County, TX
Pituophis melanoleucus (pine snake)			
P. m. melanoleucus	2108	Conant, 1958	
P. m. lodingi	1930	Conant and Collins, 1991	
P. m. mugitus	2286	Wright and Wright, 1957	
P. m. ruthveni	1784	Conant, 1975	
Regina alleni (striped swamp snake)	654	Tschambers, 1950	Okeechobee County, FL
Regina grahamii (Graham's crayfish snake)	1194	Wright and Wright, 1957	
Regina rigida (glossy crayfish snake)			
R. r. rigida	794	Palmer, 1959	New Hanover County, NC
R. r. deltae	798	Shoop, 1959	Orleans Parish, LA
R. r. sinicola	660	Huheey, 1959	Cameron Parish, LA
Regina septemvittata (queen snake)	922	Triplehorn, 1949	Defiance County, OH
Rhadinaea flavilata (pine woods snake)	402	Allen, 1939	Marion County, FL
Rhinocheilus lecontei (long-nosed snake)			
R. l. lecontei	892+	Klauber, 1941	
R. l. tessellatus	1041	Wright and Wright, 1957	
Salvadora deserticola (Big Bend patch-nosed snake)	1143	Tennant, 1984	
Salvadora grahamiae (eastern patch-nosed snake)			
S. g. grahamiae	953	Conant, 1975	

Species or subspecies	Total length (mm)	Source	Locality
S. g. lineata	1194	Conant, 1958	
Salvadora hexalepis (western patch-nosed snake)			
S. h. hexalepis	1014	Wright and Wright, 1957	
S. h. mohavensis	1041	JB [9]	Los Angeles County, CA
S. h. virgultea	1075	Bogert, 1945	Los Angeles County, CA
Seminatrix pygaea (black swamp snake)	483	Behler and King, 1979	
S. p. pygaea	426	Ditmars, 1936	Marion County, FL
S. p. cyclas	348	Neill, 1951	Broward County, FL
S. p. paludis	470	Palmer and Paul, 1963	New Hanover County, NC
Senticolis triaspis (green rat snake)			
S. t. intermedia	~1470	Dowling, 1960	
Sonora semiannulata (western ground snake)	483	Wright and Wright, 1957	
Stilosoma extenuatum (short-tailed snake)	655	Woolfenden, 1962	Hillsborough County, FL
Storeria dekayi (DeKay's snake)			
S. d. dekayi	492	Groves, 1970	Baltimore County, MD
S. d. limnetes	431	LSUMZ 43753	Cameron Parish, LA
S. d. texana	459	Conant and Collins, 1991	
S. d. victa	483	Conant, 1975	
S. d. wrightorum	527	Conant, 1975	
Storeria occipitomaculata (red-bellied snake)			
S. o. occipitomaculata	406	Wright and Wright, 1957	
S. o. obscura	278	Trapido, 1944	"Gulf Coast"
S. o. pahasapae	380	Baxter and Stone, 1985	
Tantilla atriceps (Coahuila black-headed snake)	230	Cole and Hardy, 1981	
Tantilla coronata (southeastern crowned snake)	330	Schmidt and Davis, 1941	
Tantilla gracilis (flat-headed snake)	249	Powell et al., 1982	Benton County, MO
Tantilla hobartsmithi (southwestern black-headed snake)	313	Cole and Hardy, 1981	Washington County, UT
Tantilla nigriceps (plains black-headed snake)	384	Boundy and Balgooyen, 1988	Cochise County, AZ
Tantilla oolitica (rim rock crowned snake)	292	Conant, 1975	
Tantilla planiceps (California black-headed snake)	386	Cole and Hardy, 1981	Alameda County, CA
Tantilla relicta (Florida crowned snake)			
T. r. relicta	229	Conant, 1975	
T. r. neilli	241	Conant, 1975	
T. r. pamlica	216	Conant, 1975	
Tantilla rubra (reddish black-headed snake)			
T. r. cucullata	654	Porras, 1982	Jeff Davis County, TX
T. r. diabola	578	Tennant, 1984	Val Verde County, TX
Tantilla wilcoxi (Chihuahuan black-headed snake)	356	Schmidt and Davis, 1941	
Tantilla yaquia (Yaqui black-headed snake)	325	Cole and Hardy, 1981	
Thamnophis atratus (aquatic garter snake)			
T. a. atratus	~1016	JB [10]	Santa Clara County, CA
T. a. aquaticus	~875	MVZ 47999	Napa County, CA
T. a. hydrophilus	916	MVZ 19197	Siskiyou County, CA
Thamnophis brachystoma (short-headed garter snake)	559	Conant, 1958	
Thamnophis butleri (Butler's garter snake)	737	Minton, 1972	Howard County, IN
Thamnophis couchii (Sierra garter snake)	1062	MVZ 17441	Inyo County, CA

Species or subspecies	Total length (mm)	Source	Locality
Thamnophis cyrtopsis (black-necked garter snake)			
T. c. cyrtopsis	1070	Conant and Collins, 1991	
T. c. ocellatus	1092	Conant, 1975	
Thamnophis elegans (terrestrial garter snake)	1092	Stebbins, 1985	
T. e. elegans	813	Wright and Wright, 1957	
T. e. arizonae	1051	Gehlbach, 1965	Zuni Mountains region, NM
T. e. biscutatus	~1070	Nussbaum et al., 1983	
T. e. nigrescens	920	Hebard, 1950	King County, WA
T. e. terrestris	776	MVZ 18130	Alameda County, CA
T. e. vagrans	~970	Nussbaum et al., 1983	
T. e. vascotanneri	983	Tanner and Lowe, 1989	Emery County, UT
Thamnophis eques (Mexican garter snake)			
T. e. megalops	1120	Rosen and Schwalbe, 1988	SE AZ
Thamnophis gigas (giant garter snake)	1626	Stebbins, 1985 (11)	
Thamnophis hammondii (two-striped garter snake)	1068	MVZ 63696	Los Angeles County, CA
Thamnophis marcianus (checkered garter snake)			
T. m. marcianus	1088	Vial, 1957	Imperial County, CA
Thamnophis ordinoides (northwestern garter snake)	965	Stebbins, 1985	
Thamnophis proximus (western ribbon snake)	1268	Wright and Wright, 1957	
T. p. proximus	1075	Minton, 1972	IN
T. p. diabolicus	1232	Conant, 1975	
T. p. orarius	1232+	Rossman, 1963	Cameron County, TX
T. p. rubrilineatus	1219	Conant, 1975	
Thamnophis radix (plains garter snake)			
T. r. radix	845	Smith, 1949	Chariton County, MO
T. r. haydeni	1093	Nero, 1960	McLean, SAS
Thamnophis rufipunctatus (narrow-headed garter snake)	953	Boundy, 1994	Apache County, AZ
Thamnophis sauritus (common ribbon snake)			
T. s. sauritus	970	Mitchell, 1994	VA
T. s. nitae	~928	FSM 12150	Wakulla County, FL
T. s. sackeni	1018	Rossman, 1963	Dade County, FL
T. s. septentrionalis	862	Minton, 1972	IN
Thamnophis sirtalis (common garter snake)			
T. s. sirtalis	1372	Froom, 1972	Oak Ridges, ONT
T. s. annectens	1086	Tennant, 1984	Young County, TX
T. s. concinnus	1295	Wright and Wright, 1957	
T. s. dorsalis	1311	Conant, 1975	
T. s. fitchi	1276	Robinson, 1958	Fresno County, CA
T. s. infernalis	1060	MVZ 47724	San Mateo County, CA
T. s. pallidulus	1118	Hunter et al., 1992	ME
T. s. parietalis	1241	Conant, 1975	
T. s. pickeringii	1036	Hebard, 1950	King County, WA
T. s. semifasciatus	905	Smith, 1961	IL
T. s. similis	997	Conant, 1975	
Trimorphodon biscutatus (western lyre snake)			
T. b. lambda	1026	Klauber, 1940b	Pima County, AZ
T. b. lyrophanes	1055	Klauber, 1940b	
T. b. vilkinsoni	1041	Conant, 1975	
Tropidoclonion lineatum (lined snake)			
T. l. lineatum	438	Powell et al., 1990	Jackson County, MO
T. l. annectens	446	Collins, 1993	Sedgwick County, KS

Species or subspecies	Total length (mm)	Source	Locality
T. l. texanum	572	Tennant, 1984	Dallas County, TX
Virginia striatula (rough earth snake)	324	Conant, 1958	
Virginia valeriae (smooth earth snake)			
V. v. valeriae	337	Conant, 1975	
V. v. elegans	393	Laposha and Powell, 1982	Jackson County, MO
V. v. pulchra	320	Richmond, 1954	PA
Micruroides euryxanthus (western coral snake)			
M. e. euryxanthus	615	Babb and Aitken, 1989	Pima County, AZ
Micrurus fulvius (harlequin coral snake)			
M. f. fulvius	1207	Neill, 1957	FL
M. f. tener	1213	Tennant, 1984	Brazoria County, TX
Pelamis platurus (yellow-bellied sea snake)	1143	Stebbins, 1985	
Agkistrodon contortrix (copperhead)			
A. c. contortrix	1321	Conant, 1958	LA
A. c. laticinctus	946	Tennant, 1984	Denton County, TX
A. c. mokasen	1346	Ditmars, 1929	Westchester County, NY
A. c. phaeogaster	1067	Fitch, 1960	Douglas County, KS
A. c. pictigaster	835	Conant, 1975	Terrell County, TX
Agkistrodon piscivorus (cottonmouth)			
A. p. piscivorus	1880	Conant, 1958	Dismal Swamp, NC-VA
A. p. conanti	1892	Conant, 1975	FL
A. p. leucostoma	1575	Gloyd and Conant, 1990	Yazoo County, MS
Crotalus adamanteus (eastern diamondback rattlesnake)	2515	Ditmars, 1936	central FL
Crotalus atrox (western diamondback rattlesnake)	2337	Klauber, 1956	Dallas County, TX
Crotalus cerastes (sidewinder)			
C. c. cerastes	637	Boundy and Balgooyen, 1988	San Bernardino County, CA
C. c. cercobombus	628	Klauber, 1956	
C. c. laterorepens	824	Klauber, 1956	
Crotalus exsul (red diamond rattlesnake)			
C. e. ruber	1625	Klauber, 1937	
Crotalus horridus (timber rattlesnake)			
C. h. horridus	1880	Ditmars, 1936	Berkshire County, MA
C. h. atricaudatus	1892	Klauber, 1956	Iberia Parish, LA
Crotalus lepidus (rock rattlesnake)			
C. l. lepidus	775	Tennant, 1984	Val Verde County, TX
C. l. klauberi	828	Klauber, 1952	Santa Barbara, CHI
Crotalus mitchellii (speckled rattlesnake)			
C. m. pyrrhus	1295	Klauber, 1936	
C. m. stephensi	943	Klauber, 1941	
Crotalus molossus (black-tailed rattlesnake)			
C. m. molossus	1321	Tennant, 1984	Kerr County, TX
Crotalus pricei (twin-spotted rattlesnake)			
C. p. pricei	640	Klauber, 1956	
Crotalus scutulatus (Mojave rattlesnake)			
C. s. scutulatus	1373	Tennant, 1984	Brewster County, TX
Crotalus tigris (tiger rattlesnake)	885	Klauber, 1956	
Crotalus viridis (western rattlesnake)			
C. v. viridis	1515	Klauber, 1937	

Species or subspecies	Total length (mm)	Source	Locality
C. v. abyssus	1025	Durham, 1956	Coconino County, AZ
C. v. cerberus	1032	Klauber, 1949a	
C. v. decolor	735	Klauber, 1937	
C. v. helleri	1371	Klauber, 1937	southern CA
C. v. lutosus	1346	Klauber, 1956	
C. v. nuntius	732	Klauber, 1935	Navajo County, AZ
C. v. oreganus	1626	Klauber, 1956	Penticton, BCO
Crotalus willardi (ridge-nosed rattlesnake)			
C. w. willardi	593	Klauber, 1949b	Cochise County, AZ
C. w. obscurus	641	Harris and Simmons, 1976	Hidalgo County, NM
Sistrurus catenatus (massasauga)			
S. c. catenatus	1003	Conant, 1975	
S. c. edwardsii	530	Gloyd, 1955	Cochise County, AZ
S. c. tergeminus	883	Conant, 1975	
Sistrurus miliarius (pigmy rattlesnake)			
S. m. miliarius	665	LSUMZ 40587	Richland County, SC
S. m. barbouri	803	Conant and Collins, 1991	
S. m. streckeri	638	Gloyd, 1940	Craighead County, AR

Notes:

1. A DOR measured by me 26 May 1979, NW of Adelanto.
2. A DOR collected 5 June 1979, 12 mi NE of Sells, now in CAS.
3. Conant and Collins (1991) give 828 mm and 32.5″; the 32.5″ converts to 824.5 mm, and may be the same as Neill's record (below).
4. Schmidt and Davis (1941) quote Ortenburger as giving 4′3″ as the maximum. However, Ortenburger gives 106 cm (=3′6″) as the maximum length. The KU specimen, from Pocatello, exceeds Ortenburger's maximum.
5. Based on an uncatalogued University of California, Santa Barbara, specimen from near Gorman, measured by me.
6. Martof et al. (1980) give 1194.
7. An AOR female, 344 SVL, measured NW of Mt. Abel; tail incomplete; TTL extrapolated from TL/TTL ratio for females in central California.
8. A DOR measured by me on 6 September 1982, north of Hollister.
9. A DOR measured by me 26 May 1978, NW of Lancaster.
10. A female from Guadalupe Reservoir measured live by me in 1976.
11. Stebbins gives 64″ [=1626 mm] and 160 cm [=63″].

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Amateurs — Conservation and Captive Care

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Introduction

During the past 35 years, I have been fortunate to work in the field of applied herpetology. I have had many good chances to learn about the habits and habitats of amphibians and reptiles in the field: in temperate zones, in the subtropics and in the tropics. I have always traveled as an observer, trying to understand. Without the help of many professional colleagues and knowledgeable amateurs worldwide, this good fortune would not have been possible. I thank them for their never-ending support.

On May 1, 1993, I sat in the Omni theater at Boston's Museum of Science, awaiting the IMAX presentation "Tropical Rain Forest." While the theater filled up, I became fascinated with the everyday mother–child behavior in humans: a boy, about four years old, apparently annoyed by the waiting for the movie, was calmed down by his mother. She tickled him gently behind one ear and he immediately started a relaxing laughing. This common scene repeated until the film was on screen. Dramatic pictures followed one after another and climaxed in multiple breathtaking scenes of the felling of giant tropical rain forest trees. Having been active in conservation work with amphibians and reptiles for almost 35 years now, and having witnessed many setbacks and disappointments sometimes enraging me, the sudden question came upon me: how would I calm a child like the small boy I witnessed earlier should he ask me, "What did *you* do to prevent the destruction of the rain forest and the countless amphibians and reptiles?"

The Random House Dictionary of the English Language (Flexner, 1987) defines amateur as follows: "A person who engages in a study for pleasure rather than for financial benefit or professional reasons," and clearly distinguishes the amateur from the hobbyist "who pursues an activity for pleasure." The amateur herpetologist may evolve from a pet-keeper, but only from one who passionately loves amphibians and reptiles as part of the environment. However, the work of amateurs does not need to be amateurish.

Amateurs' unprejudiced approach in observing animals is without any pressure (finances, laboratory space, working hours and prestige, etc.). Their interpretation of phenomena is more open; however, they are prone to generalization. Close cooperation of amateurs with scientists on a give-and-take basis can be of great benefit to both.

No matter how serious we are in an endeavor to protect nature, we can succeed only if we are knowledgeable of biological facts, the local situation and the threats. Moreover, the protection of the herpetofauna requires not only knowledge and long-term research, but also a passion for the animals. This love must be coupled with understanding of the animals' specific requirements. Our efforts will be in vain if we cannot sense and understand the multiple threats facing herpetofauna.

For example, we have learned that solely protecting crocodiles, without a chance of sustainable yield, has little or no future. Just leaving them alone, i.e., completely protecting them by bureaucratic decree, will become counterproductive for the species we intend to save.

The key role of amphibians and reptiles

Except in the extreme northern and southern regions of the earth, amphibians and reptiles have a firm position in ethnography. In stories and fairy tales they oppose the evil and bad, they personify intelligence and longevity; thus their status is very high (Carr, 1963). Breeding aggregations of toads and frogs, at least in temperate zones, trigger the collecting and exploring instinct in young people, imprinting many future herpetologists and naturalists. The first-hand experience of the phenomenon of metamorphosis—not seen on an anonymous video-screen—is to be rated higher than the painful loss of a few froglets.

It seems remarkable to me to note the absence of amphibians and reptiles in the traditional pictures of Noah's Ark. In the first Red Data Books, the log books of the modern Ark, amphibians and reptiles were also neglected. On the other hand, amphibians were key figures in classical embryological research, and were important models in the study of the evolution of vertebrates. And *Xenopus* was a most important frog for millions of young mothers! For modern man, amphibians and reptiles have become more and more an open window to the better understanding of large-scale ecological systems and the message to our survival inherent in such systems. Their diversity of forms and behaviors have allowed reptiles and amphibians to colonize many habitats. Because of this and their relatively short generations, they can serve as warning species for the loss of biodiversity in such specific habitats.

Amphibians have a deep value in the traditional life of man. They are visible and audible parts of wetland habitats. Today, in many parts of the world they are silent. Their sudden loss is even identified by laymen, who as children were fascinated by the immense frog choruses along the lakes and ponds. This has finally begun to alarm politicians and conservation organizations throughout the world. The International Union for the Conservation of Nature (IUCN) has established a Specialist Group, the Declining Amphibian Populations Task Force, to

investigate and explore the phenomena. Much of the basic work of the task force is performed by amateurs.

Unfortunately, the reptiles have no such croakers and peepers and many of them just disappear. A century-long decimation of snakes, often supported by a bounty system, has left traces into our modern times: there still seems to be very little tolerance for snakes.

The majority of amphibians and reptiles can be successfully kept under captive conditions, provided that specific parameters are controlled (Warwick et al., 1995). So, the current trend to establish self-sustaining populations has, at least in Europe, a very sound base. However, for the sake of maintaining some diversity, we must not concentrate on the few flagship species, but also work with the still common ones!

The role of amateurs in the conservation of amphibians and reptiles

Europe has a long tradition of private keeping of amphibians and reptiles in terraria. One of the first books dealing with the natural history of amphibians and reptiles, issued in 1833 by the Swiss naturalist Schinz, also contained detailed information on how to keep them in the house (Schinz, 1833). The classical four-volume work *Terrarienkunde* was written by an optometrist in Germany (Klingelhöffer, 1931).

The complex brood care and the fascinating reproductive behaviors in poison arrow frogs of the genus *Dendrobates* were first observed in small home terraria by amateurs just about 60 years ago: by Oeser (1932) for *Dendrobates tinctorius* and Senfft (1936) for *Dendrobates auratus*. Since then many other amateurs have pioneered in breeding other species.

Weygoldt's (1980) observation showed that brood care in *Dendrobates pumilio* not only involves egg attendance and tadpole transport, but also tadpole attendance and feeding. Each tadpole is carried by the attending female to a water-filled bromeliad leaf axil and regularly fed on unfertilized eggs. The tadpole responds to an approaching adult with a specialized, conspicuous behavior signaling its presence. Weygoldt (1980) also made observations under captive conditions. The egg-feeding behavior has been cited in textbooks (Duellmann and Trueb, 1986; Pough et al., 1989). However all previous attempts to raise tadpoles of *Dendrobates pumilio*, a species common in the trade prior to its inclusion on CITES Appendix II (1987), had failed until Bechter (1978) discovered in one of his home terraria that these tadpoles will feed on frog eggs and can artificially be raised on a diet of chicken-egg yolk. Weygoldt (1980) then speculated that *Dendrobates pumilio* is apparently the first species of frog in which feeding of free-living larvae by a parent and communication between tadpoles and adult have been observed.

The result of field studies in Panama in 1987 by Brust demonstrate that female *Dendrobates pumilio* do feed eggs to their offspring under natural conditions and that the tadpoles are obligatorily oophagous. No other vertebrate has been documented to rear offspring actively on ova (Brust, 1993).

Some zoos participate in these breeding efforts (see Slavens and Slavens, 1992) and use the Dendrobatidae as a brilliant ambassador to alert the general public on the need to save the Neotropical rain forest. It is very important at this point to emphasize that the German-based working group "Anuren" with Helmut Zimmermann (Zimmermann and Zimmermann, 1989; Zimmermann, 1989) as guiding spirit, cooperates with local herpetologists and assists their specific education in Brazil, Ecuador and Madagascar (Zimmermann et al., 1990). Members of the working group bred 1202 specimens in their home terraria in 1992, representing over 20 species of Dendrobatidae. This has influenced the captive breeding programs of amphibians within the IUCN network (Captive Breeding Specialist Group).

The Swiss herpetologist Heusser started his professional studies on the European toad (*Bufo bufo*) as an amateur while he was attending public schools and continued for a period of over 20 years. His first publication (Heusser, 1956) contains knowledge, still valid today, on the habitat requirements of some amphibia. His research and contributions on the breeding migration of *Bufo bufo* (Heusser, 1958; 1960) triggered international studies and rescue operations on the "road-kill phenomena in migrating amphibians" (Nöllert and Nöllert, 1992; Langton, 1989). This led to awareness that protecting migrating species means saving not only the breeding sites, but also the hibernaculum and the areas between. Rescue operations also made authorities aware of conservation needs for wildlife other than mammals and birds. In Switzerland, the mass mortality of the common frog (*Rana temporaria*) during the winter of 1990/91 was studied and analyzed by a team of scientists with the help of amateurs. The results suggest that the frog mortality was mainly due to oxygen deficit (Gerlach and Bally, 1992).

The lack of sound biological and ecological data is not only a problem for the many secretive or nocturnal species. We notice the same with very popular, so called "well known taxa." Important biological data on the European chameleon (*Chamaeleo chamaeleon*) were collected only 20 years ago by young German amateur herpetologists and were incorporated into the recent technical literature (Klaver, 1981; Zimmermann et al., 1975), because no other data were available. I'm al-

Table I. Milestone discoveries by amateurs on reproductive biology in anurans.

Year	Author	Species
1932	Oeser	*Dendrobates tinctorius*
1936	Senfft	*Dendrobates auratus*
1965	Mudrack	*Mantella aurantiaca*
1969	Mudrack	*Phyllobates* sp.
1970	Busse	*Rhinoderma darwinii*
1973–75	Polder	*Dendrobates azureus*
1978	Bechter	*Dendrobates pumilio*

most certain that Dodd and Franz (1993) will eventually call on amateurs for assistance with their survey on status information on common species in Florida!

Prime-time nature programs on television have inspired amateurs to travel to the tropics and explore the native herpetofauna of regions from where very little biological data were previously available.

The very localized distribution of the golden mantella (*Mantella aurantiaca*) in eastern Madagascar near Perinet/ Andasibe was surveyed in 1989, biological and abiological data collected and the herpetological by-fauna recorded (Zimmermann et al., 1990;, Zimmermann et al., 1992). During this operation a new species, *Mantella crocea*, was discovered. Repeated field studies in 1991 and 1992 revealed that the two species were endangered by deforestation and mass collecting; in some areas they were already missing (Zimmermann and Hetz, 1992). The amateur researchers, whose surveys were funded by the German Bundesverband für fachgerechten Natur- und Artenschutz, suggested an enlargement of the reserve near Perinet (Reserve special d'Analamazaotia [Mantady]) and interconnection with the remaining areas of distribution. For all species of the genus *Mantella*, breeding programs along the lines given by the IUCN / Captive Breeding Specialist Group have been established.

Also in Madagascar, another German amateur, Wolfgang Schmidt, made unique observations on *Brookesia minima*, one of the smallest lizards known. Prior to copulation the female (body length 21 mm) carries the male (body length 17 mm) for some time on her back. The goal for such unique behavior is probably a full synchronization of both sexes in their complex habitat, the floor of the rain forest. (Schmidt and Simon, 1988; Schmidt, pers. com.).

In 1984 a German cameraman and amateur herpetologist filmed a monitor in the Yemen Arab Republic. Sometime later, Ulrich Joger of the Darmstadt Museum watched that movie on television and realized that that monitor was something new. Further investigations and research eventually led to the discovery of a previously unknown monitor, which was described as *Varanus yemenensis* (Böhme et al., 1989).

This example emphasizes the need for good photographic documentation by amateurs. Otherwise their incidental observations might be "downgraded in modern, question-oriented science" (Gans, 1991), which is subject to the rigid doctrine that only inquiries based on known phenomena can properly proceed.

The documentation on the extirpation of a population of the Euphrates softshell turtle (*Rafetus euphraticus*) in southeast Turkey was done by Gramentz (1993), a German amateur working in that area for several years (Gramentz, 1991). Waller's (1986) contribution on *Geochelone chilensis* is another noteworthy documentation by an amateur.

The work of the amateur herpetologist is not dependent on public and private funding. Amateurs' studies are generally prompted by their wish to discover new frontiers, and characterized by enthusiasm, persistence and the careful use of their own funds. In some cases, as we have heard, their long-time engagement in studying one problem brings remarkable results. All too often, young, inexperienced postgraduates start their professional work on an interesting project and leave it unattended upon receiving their academic degrees.

At this point, I would like to emphasize that studies on the ecology and behavior of living amphibians and reptiles may need to be accompanied by observations under controlled conditions, i.e., in terraria. Questions relating to prey-capture, preferred microclimatic data or breeding behavior can properly be observed in artificial but naturalistic environments. Clearly, sterile laboratory conditions or "shoe-box" situations are unacceptable.

The cooperation between amateurs and professional biologists, such as veterinarians, botanists, geologists, meteorologists and ethnographers, must be intensified and based on partnership. Konrad Lorenz made no secret of learning from amateurs (Kreuzer, 1984). The doyen of European herpetology, Robert Mertens, worked very closely with amateurs and assisted many of them personally. He very successfully published his research in popular natural history magazines (Klemmer, 1977).

I consider it very important that professionals publish on their work in popular natural history magazines. Only if they do so, can the public learn to appreciate the benefits of scientific research. Too often, popular books repeat the misinformation of earlier volumes, because recent research is published only in scientific journals.

Noteworthy samples are the publications on the poison arrow frogs by Myers and Daly (1983), and on the breeding strategies of frogs by Duellmann (1992), and the book *The Year of the Turtle* (Caroll, 1991). Excellent popular readings on crocodilians include Pooley (1992) and Webb (1980).

The oeuvre on the venomous snakes of Europe and the genus *Vipera* in Africa and Asia by Brodmann (1987), an elementary school teacher, carries an almost missionary plea for better understanding of snakes to render their survival possible. Gove's (1991) "children's" book on the watersnake is not only for children, but also for parents who may not approve a more direct introduction to herpetology.

The Global Conservation Action Plan by the Tortoise and Freshwater Turtle Specialist Group of IUCN by Swingland and Klemens (1989) was one of the first international publications dealing with conservation aspects of tortoises. Despite its potential value, this publication received relatively little general attention, at least in Europe. Pritchard's (1992) popular account appeared only in English.

In this context I cite from the preface of Allan Greer's *Biology and Evolution of Australian Lizards* (Greer, 1989). "Amateurs have contributed substantially to the development of Australian herpetology. Unfortunately the role of amateurs in Australian herpetology is now under threat from certain state authorities. - As a result, much opportunity for knowledge and personal development through investigation, discovery and discussion is lost." Fortunately, this pessimistic

prognosis has not proven wholly true, as the Australian Herpetological Taxon Advisory Group of the Captive Breeding Specialist Group has recognized the potential importance of private herpetologists to the conservation of native herpetofauna (Banks, in litt.).

The success of many amateurs in keeping and breeding different species of amphibians and reptiles is a biological and intellectual gain. For some taxa these data may be the only ones we have. I'm convinced that the art of breeding will improve constantly if the keeper is not forced to go underground because of increased activity against all keeping of wild animal species.

The laws

Nature protection is becoming more and more bureaucratic and political. The real causes for the destruction of species and habitats cannot be controlled, so there is an increasing opposition to the amateur who occasionally catches a specimen for his own studies. In Switzerland, the catching and keeping of a tree frog, *Hyla arborea*, is illegal. However, the landowner who fills in the "unattractive wetland," the habitat of the treefrog, sometimes even gets state's permits to do so. The tendency in many countries around the world to restrict the keeping of amphibians and reptiles gives cause for concern. I do not oppose certain security measures for venomous snakes or large crocodilians, nor am I against minimum-space cage norms as practiced in Switzerland (Dollinger 1977), nor against sound conservation laws. But I'm against subtle paper laws restricting the keeping of herpetofauna and criminalizing the amateurs.

The many bona-fide private environmental groups that assist professional biologists, decision makers, lawyers, veterinarians and marketing specialists in genuine conservation, unfortunately are more and more diluted by emotional, unscientific efforts of other conservation groups. "Conservation" has become, in consequence, almost a meaningless environmental issue, or just an excuse to cover the general global indisposition with a blanket of busy activity. There are youths in Europe and elsewhere who are under the impression that they have no influence on their environment. Therefore they feel useless and lost and become lethargic.

In our struggle for conservation of nature and its resources, we should not take advantage of the global fear of loss of biodiversity to create under these circumstances additional legal restrictions. Despite good intentions this can eventually lead to further impoverishment of our life.

International treaties, such as CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) or the Berne Convention (Convention on the Conservation of European Wildlife and Natural Habitats) not only define threatened forms, but also nominate candidate species, not yet included. After inclusion of all Testudinidae in Appendix II of CITES, the once-heavy trade in Mediterranean *Testudo* sp. shifted to the New World *Terrapene* sp. After the poison arrow frogs, Dendrobatidae, were listed, the trade in *Mantella* increased drastically.

Some of the species listed in Appendices I, II and III of CITES were included for good reasons. The trade figures prove this. But the list of those species that were included with almost no biological data, but only under heavy pressure by some NGOs [nongovernment organizations], is long and difficult to survey.

The inclusion of the Dendrobatidae, the poison arrow frogs, into Appendix II of CITES, 1987, is such an unfortunate decision. They became highly endangered by the destruction of the habitat but not through the trade (Zimmermann, 1989). Despite the fact that CITES has been in effect since 1975 and is signed today (March 1995) by 128 governments, many signatory states, NGOs and individuals have not yet understood that CITES is NOT a conservation treaty, but an international trade convention.

Therefore, CITES cannot substitute for national conservation laws. The conservation of our herpetofauna needs the protection of species and habitats. Sound national laws and a positive attitude of the local population are the only effective measure! However legislation must recognize the ability of amateurs to assist, and support them accordingly. Such national law should not criminalize the individual collection of a common species, but strictly control the wholesale trade in threatened forms.

Conclusions

Breeding and studying amphibians and reptiles under captive conditions, and also monitoring them in their natural habitat, and managing these habitats, are all areas in which amateurs are successful. In publishing their observations, they enrich our knowledge about the biodiversity of life.

Success in conservation of species and environments depends on the responsibility of the individual who through his knowledge not only identifies the threats, but also personally cares. Many such individuals, through the web of influence, will alert decision makers. Serious amateurs are doing a first-rate job and for this they need all encouragement. They are to be considered as herpetologists, as their level of understanding has been proved and many are accepted by their scientific herpetologist colleagues. To leave the fate of biodiversity solely to lawyers, professional biologists and civil servants, hoping for a better future with a more nature-oriented generation, is just as wrong as a belief that science can deliver kitchen-ready conservation menus.

Nobody will regret the loss of things of which there was never any knowledge available. Conservation work also requires a certain amount of emotion and love for the creature. If there is no longer a personal shock about the loss of a frog, a lizard or a turtle and their habitat, ecosystems will dissolve. How would you otherwise explain the destruction of marginal land along the railroad tracks, the highways or industrial areas. Besides the loss of habitat, there will be a loss of tradition to enjoy wildlife, and thus a loss of quality of life!

Despite a few positive results in breeding some taxa, more efforts are needed by amateurs and by professional herpetologists to preserve self-sustaining populations in captivity and to

protect ecosystems.

You may recall the hypothetical question in the introduction: "What did you do to prevent the destruction of the tropical rain forest?" My answer is very egoistic: I was fascinated by the diversity of this unique habitat and I always had fun on the many encounters I had with amphibians and reptiles (at home and abroad). On every occasion, I have tried to pass on some of that fascination and to alert about the loss of nature. I hope you will join me to alert all decision makers to fight environmental indifference.

Remember, we still hold many trumps in our hands: live amphibians and reptiles versus computer simulations. "Pick up one living thing and you will find the whole universe attached to it."

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Keeping Reptiles, Smuggling Wildlife, Wildlife Bureaucrats
Smuggled-2, An Australian Perspective

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PART 3. SOUTH AUSTRALIA — PROBLEM OFFICIALS

Wayne Court, Phil Parks, Michael Willment and Keith Polley had all been licensed reptile keepers and members of the local reptile society for some years. In 1989, they decided to legally import some crocodiles from John Lever of Lever's Crocodile Farm, Rockhampton, Queensland.

Lever made enquiries about export or import permits with his local wildlife official Gary Porter and was told "it wasn't required because under section 92 of the constitution it was unlawful for him to provide me with the form with a permit to remove fauna" (Section 92 of Australia's constitution states that there must be no barriers to free trade between Australian states).

Having had repeated run-ins with local SA/NPWS officials, the four South Australians got Stephen Clark, a lawyer from Gawler, to act on their behalf. He advised them it was legal to import the animals without import/export permits. Prior to this action, the four men had previously traded reptiles interstate on 20 occasions with 40 import/export permits and on seven occasions without such permits from Victoria and Queensland. Neither Queensland or Victoria were issuing such permits at the time.

Following importation of the crocodiles on July 12, 1989, the men were all charged by SA/NPWS with having illegally imported them. Again following Clark's advice they defended the matter. Clark told the four men that they should win the case and as a result recoup at least 66 per cent of their legal and other costs. Prior to the final hearing, Clark sought expensive legal advice from interstate and even traveled to Brisbane and Sydney in relation to the matter.

During the course of the case it was adjourned three times in which time the SA/NPWS altered the local act so as to guarantee a conviction, with the prosecution relying on an altered act with altered wording in the relevant part, that hadn't been in force at the time of the alleged offense.

On October 31, 1990, the final day of the hearing, the four men were told by their lawyer to plead guilty, which was later described by them in a letter as "a surprise to us and the full implications of this are only now realized." The four men were fined about $625 each over the incident. They also got stuck with a $30,000 legal bill, which left them all in financial ruins.

During the course of the case it was revealed that SA/NPWS, in particular officials Nick Bailey and David Barrington, had been waging a vendetta against the four men, in particular Wayne Court. SA/NPWS officials had been totally inconsistent in their policies of issuing licenses and in administration of the act. Although the SA/NPWS officials had been exceptionally pedantic and retrospective in their administration of the act to these four, some other reptile keepers were being given more favorable treatment. A statement tendered to the court by a well-known local keeper said "I can't remember being knocked back for a permit. . . . I have accidentally imported without permits . . . and they have always been happy to provide me with a permit retroactively. I am unhappy with an import and export system because it is a nuisance on the point of view of being unnecessary bureaucratic red tape. . . ." Perhaps it should be noted that the original importation of crocodiles had been done with the full knowledge of the local officials. Even more ironic was the fact that an import permit for crocodiles was issued to Wayne Court before the case had finished.

In summing up, the Magistrate Ms. McInnes was highly critical of the whole case, including the NPWS and the lawyers involved. She said, "It certainly seems extraordinary to me that a department and an association which should be providing valuable services in tandem, instead propose to use their resources fighting each other. . . . It surprises me that practical guidelines for permits for the import and export of reptiles from the state cannot be arranged through discussion of the issues by the parties. It does no credit to the Department that members of voluntary organizations supplementing the work of the Department feel that they can only discuss administrative policies in a criminal court."

McInnes commented that the case was "political" and should never have come to court. She was particularly critical of Stephen Clark, claiming that he had used the case as a 'gravy train' and questioned his advice to his clients. Notable was that on this and two of the three other days of the matter, Clark himself wasn't present. On the final day, his appointee was apparently totally unfamiliar with the case.

Following the case a series of complaints were lodged with the Legal Practitioners' Complaints Committee of South Australia in relation to the way Clark had used the case to "excessively line his pockets." Court later said making the complaint was "a complete waste of time."

Court's problems with SA/NPWS weren't restricted to the above court case however. NPWS officials Bailey and Barrington, who according to Court "had a set on me," organized a series of incidents, which while costing taxpayers a fortune, did nothing for wildlife conservation. Court said the harassment started after himself and friends threatened to go to the media complaining about NPWS's policies and record. According to Court, NPWS officials mounted a series of dawn raids on the properties of him and his friends. All were "busted" for "book offenses." They were all taken through the

courts and fined $80 each.

In another case Court was busted again for "book offenses." This time his error was that he had entered records of new species on new pages in his NPWS record book, rather than on the same page. In spite of a recommendation from prosecution staff not to proceed with the matter, Barrington's office overruled this and a fine was issued. Perhaps I should mention here that Court suffered from dyslexia, making book work for him more difficult than usual. On another occasion, Nick Bailey did according to Court, indicate that he had been tapping his phone by quoting to him an earlier conversation he had with Northern Territory herpetologist Graeme Gow. Phil Parks sent three letters to David Barrington of NPWS in February, May and August 1990. By June 1991, none had been replied to. In 1990, NPWS official David Heard became obstructionist in that he "lost" applications for permits sent in by the four men.

Court, Parks, Polley and Willment complained to the State Ombudsman in relation to NPWS on June 11, 1991. See excerpt below:

> Taped conversations between David Barrington and Wayne Court can be provided that demonstrate frustrations with dealing with the department.
>
> Since our offense (crocodile importing), the South Australian NPWS Act has been subsequently changed. It previously stated that the "Minister must grant a permit," whereas now it states "the Minister may grant a permit." We believe the NPWS department now deceived the courts by working on the new Act rather than the old one that was in force at the time of the "offense."
>
> On November 8, 1989, a letter was sent from Peter Mirtschin to David Barrington suggesting a conciliatory move to assist in establishing a better relationship between Mr. Wayne Court and the NPWS. The offer was not taken up.
>
> On February 24, 1990, David Heard from the SA/NPWS, visited Phil Parks and advised him that if they don't stop stirring up . . . [things] (referring to the imminent court case), the SA/NPWS will get the greenies onto us regarding the keeping of reptiles.
>
> Two more incidents occurred concurrently in August this year [1994]. During their return from a holiday in the Northern Territory, both Wayne Court and a friend Roland Burrell were tracked by aircraft, stopped at a roadblock and held at gunpoint while the car they traveled in was searched for reptiles. It was also driven to Marla Police Station and partially dismantled by NPWS officers in their search for reptiles. At the same time a raid was carried out on the home of Wayne Court in Gawler, which involved turning their water off, an officer climbing through the kitchen window, and threatened to damage the front door. A number of Australian reptiles, some firearms and record books were confiscated, all of which were later returned.

In relation to the 1990 incident where Court and Burrell were held at gunpoint, Court later found out that David Barrington had masterminded the operation. It must have cost many thousands of taxpayers' dollars. Besides using a plane to track the car, a Cattletruck, several four-wheel-drive vehicles and police cars were used to block the road as the two men drove into South Australia. The police tactical response group apprehended them. Loaded pump-action shotguns and pistols were pointed at their heads as they were made to lie face down on the roadway. Even the slightest accident could have resulted in the deaths of either man. (See earlier issues of the CHS *Bulletin* for details of the Madagascar accident in similar circumstances). Also notable is that neither men have a history of violence or have ever been accused of such. No reptiles were found on either man or their car. The case could possibly be one of the biggest bureaucratic overkills in this country's history.

The response from the Ombudsman, E. Biganovsky was according to Court, "disappointing." His letter dated September 4, 1991, said "I do not consider there to be any benefit in determining exactly what happened in this case." In Australia, the State Ombudsman's offices are meant to act as watchdogs of public service abuse. Experience in most states has shown these offices to do nothing to prevent corruption or other forms of public sector wrongdoing.

Problems Back in Queensland

John Lever had taken advice from his local NPWS official Gary Porter in relation to the export of his crocodiles to Court and friends in South Australia. According to Lever, Porter said "he had been told by his head office not to issue permits for any fauna that was going interstate . . . because of section 92." At the same time as this a friend of Lever's with a crocodile farm was being told by the Cairns office to get import/export permits and was being issued with them. Notwithstanding the assurance he'd been given by his local DEH official, Lever later found himself prosecuted by DEH/Queensland for exporting crocodiles to South Australia.

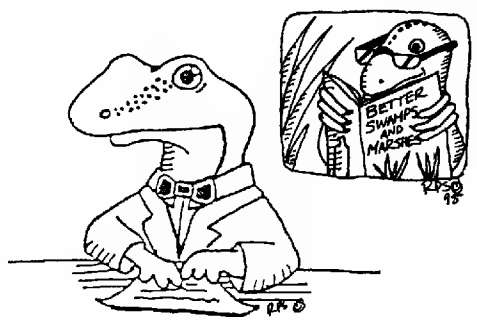
Ten days before Lever had exported the crocodiles, a CONCOM meeting with representatives of the DEH had resolved to make it policy to demand import/export permits and the law had been altered accordingly. The only problem was that nobody had been told. As Lever was the industrial representative of the state government's Crocodile Management Committee, he would have expected to be the first to know, but wasn't made aware of it at all until he was charged.

On January 24, 1994, snakeman Bill Hovey summed up the situation in Queensland, saying "Up here, you can't get a snake unless you have a license, you can't have a license unless you have a snake, you can't get an import permit unless you have an export permit, and you can't get an export permit unless you've got an import permit, so how's the system meant to . . . run?"

Coming soon: *Part 4.*

Bull. Chicago Herp. Soc. 30(6):131-132, 1995

NEWTLINE



April showers kept many away from the April 25, 1995, meeting of the Chicago Herpetological Society at the Field Museum. In spite of the absence of several key members, President **Marcia Rybak** began the business portion of the meeting on schedule. After resolving some technical difficulties with the microphone, she introduced Adoption Chairperson **Char Haguewood**. Char announced that she had a request for a small corn snake from a pre-school teacher, as well as a request for a box turtle. (I hoped these requests were by current members of the society.) New to the adoption listings were a red-eared slider, a snapping turtle, who "only snaps when no one is looking," and a caiman. She announced that flyers were still available for the October 20–22 Midwest Herp Symposium, which will feature a sale of captive-bred herps, a great line-up of speakers and a banquet.

Merchandiser **Joan Moore** offered discounts on overstocks and misprinted T-shirts and recommended several enjoyable books for children. She requested donations of cartons for shipping, as well as packing peanuts. She also solicited a donation of a portable bulletin board, as well as someone to maintain it. (The previous board mysteriously disappeared.)

Vice-President **Chris Lechowicz** announced that he had copies of the current legislative laws for the keeping of reptiles and amphibians in Illinois.

Member-at-Large **Nicole Marrello** announced that the next parasitology class will be held on May 7 at The Grove in Glenview. Cost for the class is $10 for members, $15 for non-members. She reminded us to bring a moist—not frozen—reptile fecal sample.

Librarian **Jenny Picciola** was on hand to answer any questions regarding the CHS library cart.

Ron Humbert reminded us that the CHS 2nd Annual Expo is only one month away at Triton College in River Grove. Neodesha cages were on hand for exhibitors and could be purchased by them "at cost" after the Expo.

Marty Greenwell from the Shedd Aquarium's Department of Communications and Marketing announced the opening of the white alligator exhibit is set for May 21, 1995. The exhibit covers the role of the alligator in cypress swamps and its importance to wetland conservation.

Arriving late, **Mike Miller** announced he was looking for homes for several red-eared sliders. Marcia was quick to remind him that no animals were permitted inside the museum. This led to the announcement that there is no word as to whether museum officials will allow the CHS to hold its annual "Show & Tell" meeting inside the museum.

Following the raffle, Chris introduced **Kevin Muchnick**, Vice-President of the Kansas Herpetological Society. With 200 members, the KHS is already into its fourth year. The group served as host for the 1994 Midwest Herpetological Conference. Kevin expressed his enthusiasm at being asked to speak before the CHS, "It boosts a fella's ego to be invited to the largest herp society in the United States."

Kevin began his interest in herpetology in 1987 with a kingsnake and a rat snake. However, after setting eyes on his first crocodile monitor (*Varanus salvadorii*) two years ago, he fell in love. He started his collection with two males and one female. Indigenous to the island of New Guinea, crocodile monitors are the world's longest lizards (although much of their length consists of the tail). Possessing a hearty appetite and sharp teeth, they mainly consume small rodents and birds. Tooth analysis indicates these lizards swallow their prey whole, as opposed to similar lizards, like Komodo dragons, which use their teeth to rip and tear flesh into smaller pieces. However, "A nasty bite from these critters has been known to put a few people in the emergency room," noted Kevin. His crocs are fed a diet of rats, and, thus far, have never shown any aggression towards him. Their long tails provide balance when they jump from branch to branch.

A self-taught carpenter, Kevin showed slides of his rather elaborate reptile habitat inside the basement of his home which rivals that of many zoos, as well as an outdoor enclosure that resembles a small theme park. The outdoor enclosure features a wooden deck complete with a "jungle gym" made of driftwood. Chainlink-like walls, made from a costly vinyl-coated wire mesh, allow for ventilation and exposure to natural sunlight. A peanut-shaped pond rests in the center of the deck. For a retreat, the animals are allowed access to shade beneath the deck. Three sprinkler heads provide a cool mist every 15–30 minutes.

Like something out of *Better Homes & Gardens*, the indoor facility fills the entire basement and features fire resistent walls of white paneling. Recessed halogen lamps are covered with hinged wooden frames to prevent the monitors from burning themselves on the fixtures. Enclosures resembling giant sandboxes are lined with bleached driftwood for side railings. Bleaching kills any parasites. The deep boxes are filled with approximately 113 bags of cypress mulch to encourage digging and egg laying. A closed-circuit camera provides an unobtrusive view of the habitat. A digital thermometer hooked up to the lighting system regulates the temperature at 80°F during the day and 55°F at night. A built-in pond features a drainage system which flows into the same line as the building's wastewater. Kevin believes an enclosure this large helps him to observe the monitors' natural behavior and stride. Nonetheless, two years and $17,000 later, the habitat is still not complete, according to Kevin's estimation.

Kevin's primary goal is to get his reptiles to breed. For the record, the crocodile monitor has bred only once in captivity—in Brownsville, Texas, in 1992. Kevin's female has laid a total of 15 eggs. Unfortunately, the eggs were all infertile.

Kevin showed photos of his visit to the veterinarian's office where his reptiles were "sexed" by saline injection. For this procedure, the animals were anesthetized using a small cone-like apparatus. While under, a physical exam was performed and length and weight measurements were taken. Saline was then injected into the tail well back of the hemipenis pockets. Almost immediately, the cloaca swells and, in the case of a male, the hemipenes fully emerge. After several minutes, the saline is absorbed by the muscle tissue and the hemipenes revert to normal. Kevin stated this technique can cost any where from $25 to $50 and suggested that it should only be performed by a reputable veterinarian. Kevin hopes to have better breeding luck next winter. This species of monitor can retail from $900 to $1500. Successful breeding could offset the cost of Kevin's unique husbandry approach. As special thanks, Kevin was given a CHS membership.

We stay in touch, so you stay in touch.

Respectfully yours,

NEWT

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HerPET-POURRI

by Ellin Beltz

Another book for Bartlett?

Grab your 486/586, plug in your modem and enter the Internet in search of reptiles and amphibians. Some helpful hints to get you started. Herp-Net is perhaps the best starting place for a `net neo,' contact Mark Miller by fax at (215) 464-3561, or get brave and have your machine dial his machine (215) 464-3562 (300-2400 bps 8-N-1) or (215) 698-1905 (9600 bps and 14.4 kbs) 24 hours a day. You don't need "Internet Access" to get on Herp-Net. If you do have an Internet account (or are on America Online/Compuserve, etc.), you can read the "sci.bio.herp" newsgroup with any newsreading program available on your account. Sometimes these are listed as "usenet newsgroups." If you have Mosaic, or can access the world wide web, you can visit the Herpetology World Wide Web at Harvard "http://xta1200.harvard.edu:8000/herp" or by using a gopher program. There are also subscription mailing-lists which are really good at filling your e-mailbox. These include: herpetology, declining amphibians, dinosaurs, sea turtles, cites, envirolaw, and many others. Happy hunting!

Cretaceous Park

• A Beijing University professor announced that gene fragments have been successfully taken from a 65- to 80-million-year-old dinosaur egg. The egg was found in central China in an area of Henan Province where thousands of dino eggs have been found since 1993. The egg was accidentally broken in September 1993, revealing gray-brown contents. The inner surface of the shell was covered with calcite crystals. [*Beijing Review*, April 3-16, 1995, from P. L. Beltz] An unsourced recent story says that International Airport authorities seized four fossilized dinosaur eggs in the luggage of a Japanese passenger bound for Nagoya. The passenger stated that she bought the eggs for $468. Chinese law bans fossil egg export by individuals.

• Best posting on dinosaur newsgroup: "Did dinosaurs have fleshy ears?" A museum Ph.D. examined fossil skulls and current dog skulls and replied "Maybe."

• A large meat-eating dinosaur was unearthed near Albuquerque, New Mexico, after being found by an amateur paleontologist. The fossil is estimated to be 150 million years old. [*Albuquerque Journal*, November 3, 1994, from J. N. Stuart]

• Did you know that less than 20 *Tyrannosaurus rex* skeletons have been found? [via Internet]

• Chinese fossil eggs have been examined by industrial computed tomography. This process permits researchers to make models and drawings of the embryos at a fantastic level of detail [*China Daily*, January 25, 1995, from P. L. Beltz]

Silent spring, 1995

The Associated Press reported "Pesticides are the new prime suspect in the worldwide disappearance of frogs and other amphibians. For the first time, scientists have shown how a pesticide can disrupt reproduction in frogs. The finding was reported Saturday at the American Society of Zoology meeting. . . . The finding is part of a growing body of evidence that extremely small amounts of pesticides can trigger major heath problems in animals, including humans. . . . Tiny amounts of the pesticide DDT injected into frogs and turtles disrupted the animals' hormone systems. . . ."

No comment

• *Fortune Magazine* [May 1, 1995, from K. S. Mierzwa] reports that a group of chemical-producing companies have adopted an Ecuadorian treefrog to represent their products. Apparently the amphibian, *Epipedobates tricolor*, produces a chlorine compound called epibatidine that is reportedly 1,000 times stronger than morphine and non-addictive. Therefore, the companies are using a photo of an individual of this species—nicknamed "Chlement"—on a poster touting the wonders of the new chemical.

• "Rise in Turtle Deaths May Be Good Sign—or a Bad One" [*Los Angeles Times,* December 25, 1994, from Bob Pierson] reports that 500 dead sea turtles washed ashore in 1994. This is more than any year in the last ten years, and some feel that it may be an indication of previous conservation successes. Others feel it was an indication of non-compliance with U.S. Department of Commerce rules on the use of turtle excluder devices (TEDs) in offshore waters. "More than 253 Kemp's

ridleys, including 27 of the roughly 580 adult females known to exist, were among those washed ashore [in Texas] this year. . . . Another 120 or so Kemp's ridleys have washed up in Louisiana this year."

• An Associated Press report from Dhaka, Bangladesh, quoted local news reports that tribespeople in the southeast corner of the country consider pythons a delicacy. Recently they ate an endangered python and fried 12 of the eggs before a scientist rescued some for incubation at the Dhaka zoo. [*Chicago Tribune*, April 23, 1995, from Steven Ragsdale]

• The *Daily Commercial* reprinted a *New York Times* story that stated that the number of Kemp's ridley nests at Rancho Nuevo, Mexico, have increased to 1,430. John R. Luoma wrote: "thanks to an aggressive international effort to dig up and sequester eggs in guarded corrals on the turtles' nesting beach, combined with . . . a requirement in both [U.S.] and Mexican waters for . . . TEDs . . . the Kemp's ridley population appears to be rebounding. . . . Gains could quickly be wiped out by . . . lax enforcement by federal agencies of regulations to maintain TEDs in the nets of shrimp trawlers in the Gulf of Mexico. . . . The National Marine Fisheries Service, which is responsible for enforcing the regulations, confirmed `unprecedented numbers of dead sea turtles, stranded along the coast of Texas' last year that coincided with `heavy near-shore shrimp trawling.'"

• Another possible cause of sea turtle decline, hopper dredging, is controlled along the Atlantic coast of Florida during the winter turtle migration season. Officials are considering extending the regulations to the Gulf of Mexico. According to the March 9, 1995, Baton Rouge, LA *Advocate* [from Ernie Liner]: "on-board observers confirmed that the [dredging] vessel sucked up three turtles, including the Kemp's ridley, after it had installed an experimental deflector designed to allow turtles to escape its vacuum." A spokesperson for the Texas Shrimp Association, said, "Our feeling is we have done everything we can." She added that other factors may have caused the strandings, including oil spills, habitat reduction, marine predators, and eating plastic debris.

Let's all go

Results of a 1992 space shuttle experiment are finally in, analyzed and published in the March 14 *Proceedings of the National Academy of Sciences*. The data indicate that *Xenopus* frog embryo development can occur without gravity. In another giant leap for mankind, the amphibians involved provide evidence that humans could colonize areas of different gravity, or even no gravity. [Memphis, TN *Commercial Appeal*, March 14, 1995, from Bill Burnett]

To the "toad-o-dome"

Herpetologists at Toledo Zoo reported breeding 100 tadpoles of the endangered Wyoming toad, *Bufo hemiophrys baxteri*, according to the Cleveland, OH *Plain Dealer* [May 7, 1995, from Jim Zimmerman]. Only 58 Wyoming toads are known to exist in U.S. zoos and the species is believed to be extinct in the wild. The toads who (happily, we believe) produced the tadpoles were kept in conditions designed to replicate natural breeding. The ten parent toads were 11 months old which was a shorter age to breeding condition than had been expected.

Or out in the wild

Xhongguo Quingnian Bao writing in *China Youth News*: "A great number of frogs gather in the Hengshan Mountain area in Hunan Province for a week at the beginning of spring (around February 4) every year to mate, some traveling from several kilometers away. Because of the area's forested and mountainous environment, frogs arriving here are not able to jump so groups of them can be seen crawling hurriedly towards a paddy field in front of the Fangguang Temple. Here the land is flat and with its warm weather is an ideal place for frogs to mate. As there are more male frogs than females a lot of males often pile up on one female, forming what is known as a `frog tower.' Sometimes the tower collapses because it is too high, and all the frogs fall to the ground. But they quickly pile up again." [March 23, 1995, reprinted in *Beijing Review*, May 1-7, 1995]

Doin' the tube snake boogie…

A man in Brooklyn Heights, Ohio, was arrested on charges including speeding and driving with a reportedly false license. After the man couldn't make bail, he was put in the local hokey. While changing into jail clothes, officers discovered a 1½-foot boa constrictor in his underwear. [April 11, 1995, Latrobe, PA *Bulletin* from Kathy Bricker; and Leesburg, FL *Daily Commercial*, April 12, 1995, from Bill Burnett]

Through the halls of academe

All three pre-Columbian gold artifacts that were taken from the National Geographic Society in Washington, D.C., have been recovered. The story as reported by the *Chicago Tribune* has its odder elements, too. One artifact, a gold miniature frog clutching a snake in its mouth, was reportedly recovered via a long and involved tale for $20. The man is being held by police after he contacted the Society about the $20,000 reward being offered for the piece. [March 27, 1995, from Steve Ragsdale] If anybody hears how this comes out, please send the clipping. Send a copy to "News of the Weird" while you're at it!

New Zealand considers new legislation

• Full legal protection may be granted to all New Zealand common lizard species according to a recent issue of a Wellington (?) local paper from down under. The Department of Conservation's protected species unit spokesperson, Ian Govey, said that about 400 common lizards had been properly permitted and exported. The department fears that sales at pet stores and other commercial uses will escalate. The tuataras and all of New Zealand's frog species have been protected since 1981. The Society for Research on Amphibians and Reptiles in New Zealand, and the Royal Forest and Bird Protection Society favor the legislation although some herpetologists view total protection "as unnecessary at this stage, but would like to see restrictions on trade." Adding the lizards to the existing rule is legislatively easier than writing whole new animal protection acts, so the legislation going to Parliament is

for full protection. A member of New Zealand's CITES task force was quoted as saying, "There has . . . been one attempt to post a tuatara." Current keepers will have to apply for permits during a phasing-in time. Trade in captive-borns is still permitted. Govey added that there have been no prosecutions under the 1981 act, although some lizards have been taken back. He said, "We think it's much better to seek the public's co-operation than to get too heavy-handed." [from James W. Hatfield, III]

• This situation must have been changing rapidly since Edwin Hlavka sent in the February 17, 1995, *New Zealand Herald*, headlined "Two arrests after reptiles seized. Christchurch--Two men have been arrested in Waimate in connection with an attempt to smuggle Australian reptiles into New Zealand. Customs officers seized the reptiles, probably destined for the international black market, at Auckland Airport last week. They found the 42 lizards and skinks and a snake-necked turtle concealed in the false bottom of a wooden crate containing garden ornaments. Eighteen of the lizards had died in transit. The surviving reptiles were without food and water and had started to eat each other. . . . The reptiles would be worth between $US500 and $US1000 each from wealthy buyers. . . ."

And closer to home

A news release from Jim Hahn, the Los Angeles City Attorney dated March 7, 1995, read: "The operator of a Canoga Park seafood company was sentenced to 60 days in jail and 30 days on a Caltrans work crew after he pled no contest today to criminal charges growing out of the discovery of the corpses of more than 700 turtles which died due to the conditions under which he kept them at a storage warehouse and in a parked van . . . one count each of cruelty to animals . . .and possession of a prohibited species." The latter, snapping turtles, are prohibited in California because they "pose a serious threat to native wildlife." If convicted, the man will have to pay the bill for the veterinary expenses of the Los Angeles Society for the Prevention of Cruelty to Animals/Southern California Humane Society, about $27,000. The *Los Angeles Times*, March 8, 1995, continued the story: "After an unprecedented prosecution by the Los Angeles city attorney's office, a seafood company operator found with thousands of dead and dying turtles was sentenced . . . to two months in jail." There were other turtles involved besides snappers, including red-eared sliders, diamondback terrapins, cooters and eastern painted turtles. The vet fees will be decided at another hearing. [from Allen Salzberg]

More EarthWatch projects

Study the Nile crocodile in Natal, the herpetofauna of the Kirghiz Republic with Dr. Leo Borkin of the Russian Academy of Sciences, predators on a Baja island, or sex and the single snake in Manitoba, Canada. Call (800) 776-0188 for more information. EarthWatch has supported worldwide field research since 1972. The nonprofit organization also supports projects in archaeology, art, anthropology, public health, rainforest ecology, volcanology, marine mammalogy, and coral reef studies. [via fax from EarthWatch]

It's turtles, all the way 'round

Researchers at the University of Florida, Gainesville, found that the 10,000 or so juvenile loggerhead sea turtles found in and around Baja California are swimming in across the Pacific. The distance is 10,000 kilometers (6214 miles), among the longest marine migrations known. As impossible as this may seem, mitochondrial DNA samples from nesting turtles in Japan and Australia indicate that 95 percent of the Baja juveniles tested come from the east Asian nesting grounds. [April 25, 1995, *Proceedings of the National Academy of Sciences* and *Science News*, April 29, 1995, 147(17):263, from Mark T. Witwer] Regular readers of this column will recall that similar testing indicates that turtles in the Atlantic follow the current gyres as juveniles. The January 27, 1995, *Daily Commercial* reports that "scientists want to identify the feeding grounds where the air-breathing reptiles spend most of their lives." They've outfitted three adult green sea turtles with satellite transmitters. Data are downloaded in Paris, decoded and passed to researchers in Florida. So where were the turtles? In the Bahamas, Nicaragua, Honduras, and the Caribbean islands. [From Bill Burnett] The September 18, 1994, New Orleans, LA *Times-Picayune* reports: " . . . 57 percent of the juvenile loggerheads living in the rich waters of the Mediterranean hatched on U.S. beaches. . . . They feed about 20 years in the Mediterranean before . . . return[ing] to the beaches where they hatched. . . . [They'll be] three feet in length and weigh 360 pounds. . . . The estimates of loggerhead mortality due to Mediterranean fishing range from 20,000 to 50,000 a year . . . [and] help explain why turtle populations on U.S. nesting beaches have been declining for decades."

Care-in-captivity, journalists

Congratulations to the East Texas Herpetological Society for getting great press in the Northeast News [June 7, 1994, from Gary Durkowitz]. ETHS was hosting a meeting about Australian reptiles and amphibians at the Houston Zoological Gardens Educational Building. Their regular meetings are the third Friday of even numbered months at 7:30 at the Zoo in Hermann Park.

Thanks to everyone who contributed this month and to

Brian Bankowski, Ray Boldt, J. N. Stuart, Ilene B. Sievert, Tom Taylor, Ernie Liner, Steven Ragsdale, MaryAnn Harter, Mark T. Witwer, Allen Salzberg, Jack Schoenfelder, Bryan Elwood, and Kathy Bricker. Special thanks to Edwin J. Klavka who sent a copy of the inflight magazine from Ansett NewZealand *Southern Skies*. It even has a reptile story. Tune in next month.

You can contribute, too. Send original clippings with date/publication slug firmly attached. The whole page can be mailed if you prefer. Please put your name on every clipping or use a return address label or stamp. One of these days I'm going to have to get a metal detector to get all the staples and paper clips out of my dining room rug, so please put stuff together with tape. Send to: Ellin Beltz, 1647 N. Clybourn Avenue, Chicago, IL 60614-5507. E-mail (text only) to: uebeltz@uxa.ecn.bgu.edu.

Unofficial Minutes of the CHS Board Meeting, May 19, 1995

The meeting was called to order at 8:25 P.M. Board members Brian Jones, Art Nohlberg, Mike Ross and Steve Vick were absent.

Officers' Reports:

The minutes of the April board meeting were read and approved. The Treasurer's Report was read and accepted. Current CHS membership is 1,749. Marcia Rybak reported that Gery Herrmann and a group of veterinarians have gotten together to give a scholarship to a University of Illinois Veterinary Medicine student. At Dr. Herrmann's request, the board agreed to donate a one-year CHS membership to that student. Steve Dale, writer of a syndicated "Pets" column that appears in the Sunday *Chicago Tribune*, has requested that the CHS send a *Bulletin* to him monthly. Mr. Dale has given the CHS a great deal of favorable publicity in the past. The board agreed to provide a complimentary one-year subscription.

Committee Reports:

Legislative: Chris Lechowicz reported that he contacts the Illinois Department of Conservation every two months to check on any changes in the law. At the moment, nothing is new. Legislative information can be obtained from Chris Lechowicz at the general meetings.

Shows: Joan Moore and Steve Barten recently did a presentation for a Boy Scout troop in Barrington, Illinois. Jean Linsner of the YWCA called. Ms. Linsner is looking for volunteers to do "after school" type presentations or exhibits from June 19 through Labor Day. These could be at any of four Chicago locations: 6200 S. Drexel; 436 E. 39th Street; 5244 N. Lakewood; or 5080 W. Harrison. Anyone interested in doing such a presentation should contact Ms. Linsner at (312) 372-6600, ext. 257. Be sure to report your efforts to the board, so that we may provide you with the standard exhibit agreement form, and mention your presentation in the minutes.

Ron Humbert reminded the board that it is important that anyone doing a presentation or exhibit on behalf of or in the name of the Chicago Herpetological Society be sure to use the CHS Exhibit Agreement forms. Such forms are available from the board.

Expo: Ron Humbert reported that we have obtained the required insurance for the Expo. Tables and Neodesha cages will be delivered directly to Triton College. The floor plan has been completed, thanks to Claus Sutor and Gary Fogel. The Godzilla balloon has been procured and will be installed on neighboring property on First Avenue. Triton's Horticulture Department will provide live plants. Jill Horwich reported that the event program has been sent to the printer. Ron Humbert appeared on CLTV for 40 minutes on May 18 to plug the Expo. Unfortunately, the Bulls playoff game and ER were on at that time also. Marcia Rybak will obtain White's treefrog tadpoles and will prepare a care-sheet for same. The tadpoles will be given away at the Expo to CHS members who wish to participate in the frog-growing contest.

Midwest Symposium: Symposium flyers will be available to hand out at the Expo.

Workshops: Nicole Marrello reported that only seven people attended the May 7 parasitology workshop, although many more had signed up. Unfortunately, some people who wanted to attend the workshop had to be turned away because such a large turnout was expected.

Director of Sales:

Joan Moore reports that the CHS bookstore is still in the black. The bookstore will be featured at the Expo, including a special selection of books published by Krieger Publishing.

Old Business:

Grants: The deadline for grant requests was May 1. Decisions will be announced in June.

Trailer: Dottie Humbert reported that she has done some research on trailer prices. A discussion was held as to the optimal size for a trailer, and where such a trailer would be stored. The board decided to table the discussion of purchasing a trailer until we have more information.

Meetings: Marcia Rybak requested suggestions from the board as to how to shorten the business portion of the general meeting. Several suggestions were offered.

Taxes: Jack Schoenfelder has prepared and filed the CHS 1994 tax return. Regarding affiliation with a lobbying organization, such as the National Herpetological Alliance, Jack reported that the IRS 1994 Instructions for completing form 990 state " . . . if more than 50% of the organization's governing body, officers, trustees or membership are also officers, trustees, directors or members of . . . " a lobbying organization, then that organization would be considered an affiliate of the lobbying organization. Therefore all herpetological societies, nationwide, should be free to become members of the NHA if they so choose. The 5% rule also applies. The CHS cannot contribute more than 5% of its revenues to the NHA, without compromising its tax-exempt status. The board thanks Jack for his continued help in this area.

New Business:

Jill Horwich reported receiving information about an annual husbandry guide to be published by *Reptiles* Magazine. Marcia will investigate advertising rates for that publication.

Round Table:

Nicole Marrello reported receiving complaints at swap meets that the CHS *Bulletin* is too technical. Mike Dloogatch stated that virtually all articles submitted to the *Bulletin* are published. Anyone interested in seeing more hobbyist-level articles should consider writing and submitting one.

The meeting adjourned at 9:50 P.M.

Respectfully submitted by the Recording Secretary, Jill Horwich

Advertisements

Accrue herpetological knowledge: Connect with peers worldwide. The Herpetology Online Network is active 24 hours/day. Any computer modem can access Herp-Net via (215) 464-3562 (300–1200 baud 8-N-1) or (215) 698-1905 (9600+ V32, V42bis.) Submit news via FAX: (215) 464-3561 any time.

Attention: the Varanid Information eXchange is a society of herpetoculturists sharing an interest in MONITOR LIZARDS. Members receive the bimonthly newsletter, *VaraNews*. Annual membership is: U.S., $10; foreign, $12 surface/$15 air. For a free copy, send a legal-size SASE to: Varanix, 8726D S. Sepulveda Boulevard, #243, Los Angeles CA 90045.

For sale: **HIGH QUALITY FEEDER ANIMALS** PRODUCED FROM THE BEST LAB DIETS AVAILABLE. Tenth year of production and supply of frozen feeder animals. All feeders can be removed one at a time from the bag; they are not frozen together. All orders **will arrive frozen**. Now offering *seven* sizes of mice: small newborn pinks, medium size pinks, large fuzzy pinks, extra large fuzzies/small hoppers, juvenile mice, young adults, and large adults. Also available are pinkie rats, baby chicks, and quail chicks. Orders sent special delivery, postage extra. **Free pricelist**. Kelly Haller, 4236 SE 25th Street, Topeka KS 66605, (913) 234-3358, after 6 P.M. Central Time on weekdays, all day Saturday and Sunday.

For sale: *THE GOURMET RODENT*: rats and mice—pinkies, fuzzies and adults. Quantity discounts. Please send a SASE for pricelist or call Bill Brant, 6115 SW 137th Avenue, Archer FL 32618, (904) 495-9024.

For sale: top quality mice, rats and Chinese dwarf hamsters. All sizes at competitive prices. Gary W. Allison, 919 Wyandotte Street, Bethlehem PA 18015, (215) 974-8975.

For sale: murine-pathogen-free rats and mice available in all sizes, live or frozen: pinkies, fuzzies, crawlers, small, medium and large. Frozen crawler mice in lots of 2000, $.17 each. Also available, full grown hairless mice. FOB shipping point. Master Card accepted. Call (518) 537-2000 between 8:00 A.M. and 5:00 P.M. or write SAS Corporation, 273 Hover Avenue, Germantown NY 12526 for prices and additional information.

For sale: high quality feeder mice. Shipped UPS Next Day Air. All mice are properly processed to insure a quality product. Fourth year of production and supply of frozen feeder mice. Prices: pinks, $25/100; fuzzies, $30/100; weanlings, $35/100. Also available are 4 oz.+ rats, $100/100. Quantity discounts available. The Mouse Factory, P.O. Box 85, Alpine TX 79831, (915) 837-7100, Ray Queen.

For sale: rodents and reptiles, Dallas–Ft. Worth Metroplex. J.R.'s Cowtown Critters, 1002 Harrison Avenue, Arlington TX 76011, (817) 460-RATS.

For sale: In stock, Flex-watt and Ultra-therm heating products. **Frozen rodents** always available. Mice: pinks–crawlers, 3/$1; weanlings, 40¢; subadult, 50¢; adults, 65¢; large adults, 75¢. Rats: small, 85¢–$1; medium, $1.25–2.00; large, $2.25–2.75; jumbo, 3/$10. Call on quantity discounts [note: discount on orders picked up at CHS meetings]. Live rodents available at higher prices. **Available now**: newsletter/catalog—many unique/hard-to-find herp husbandry items. It's also baby snake season! Send business-size SASE for catalog, or call. Scott J. Michaels, D.V.M, Serpent City, P.O. Box 657, Island Lake IL 60042, (815) 363-0290.

For sale: Feeder frogs and toads. *Hyla* sp., *Acris* sp., *Pseudacris* sp., small *Rana* sp., etc., twenty for $20 postpaid. *Bufo* sp. available at same price. Indicate size preference if necessary. Send money order to: Terry Dillon, 30012 Hubert Jenkins Road, Bogalusa LA 70427-6952.

For sale: GREAT FEEDER INSECTS! King mealworms at great prices (wholesale/retail). Quantity discounts. *Place your order today!* North County Exotics, P.O. Box 4856, Salinas CA 93912-4856, (408) 663-0566, please leave message.

For sale: turtle and tortoise chow, excellent food—1 lb, $5; 3 lbs, $10; 5 lbs, $15 (postage paid). Send cash, check or money order to Herp's Delight, Dept. C, 20 Ablett Avenue, Whitesboro NY 13492.

For sale: commercial turtle pellets (extruded dry floating type, 40–56% protein). Fed to thousands of turtles grown on commercial farms in the South for meat and pets. A complete, balanced diet for maximum growth, will not cause shell deformities, $20 for 10 pounds postpaid. Send money order to: Terry Dillon, 30012 Hubert Jenkins Road, Bogalusa LA 70427-6952.

For sale: reptile cage disinfectant and deodorant. Kills many types of infectious disease detrimental to herps. $3.91 for 2 oz (makes 1 gallon). Wholesale and quantity prices available. Make checks payable to Bengal Pets, Inc., 1088 Chapman Road, Jesup GA 31545, (912) 530-6384.

For sale: Tired of getting bitten while collecting, feeding or maneuvering animals? Try my Whitney tongs—10% discount to herp society members—2′, $65 each; 2½′, $66 each; 3′, $67 each; 3½′, $68 each; 4′, $69 each, 5′, $85 each; 6′, $90 each. Will ship U.P.S. extra. Send money order or cashier's check to Don Lunsford, 5661 Walkerton Drive, Cincinnati OH 45238.

For sale: 1995 HERPETOLOGICAL DIRECTORY. Valuable information source containing private and commercial breeders, wholesalers, foreign exporters, U.S. and foreign herp societies, food sources, supplies, publications, more. . . . $15. MC/Visa. Great Valley Serpentarium, 2379 Maggio Circle, Unit C, Lodi CA 95240, (209) 369-7737.

For sale: *Smuggled — The Underground Trade in Australia's Wildlife* (149 pp.) by Raymond Hoser, the controversial best-seller that was banned by corrupt Australian wildlife officials; and *The Hoser Files* (322 pp.) Raymond Hoser's latest book, detailing corruption in Australia's bureaucracy. This book has created havoc even before publication. Send international money orders for $20 per book (post free)(signed by author) to P.O. Box 599, Doncaster, Victoria 3108, Australia, or phone 61 18 588699 for details.

For sale: books. *The Snakes of Malaya* by M. W. F. Tweedie, $62; *The Snakes of Europe* by J. W. Steward, $44; *A Field Guide to the Snakes of South Vietnam* by S. Campden-Main, $14; *The Care of Australian Reptiles in Captivity* by J. Weigel, $32. All prices include postage. Plains Reptile, P.O. Box 5818, Fargo ND 58105, or e-mail at mbjerke@badlands.nodak.edu

For sale: *REPTILES* MAGAZINE INDEX. Locate every reference in *Reptiles* Magazine from the beginning. Every species mentioned, where the photos are. English and Latin names. Updated monthly. Single issue $5, full-year subscription (4 issues, quarterly) $18. Send check or money order to Reptile Index, 7354 Cardigan Circle, Atlanta GA 30328, (404) 396-4414.

For sale: collection of 120 different outdated antivenom/snakebite kits from all over the world, $600. Also, collector's item—snake catching box made and used by Carl Kauffeld. This is the box Carl used on his collecting trips to South Carolina, 30″l x 20″h x 12″w, three compartments, top opens and two side compartments. Box was never cleaned out and still has (unsoiled) *Staten Island Sunday Advance* newspapers dated April 17, 1977. See book *Snakes and Snake Hunting* for picture of box, $500. Steve, (516) 957-3624. [NY]

For sale: set of five posters first published by Army Air Forces Tactical Center for easy identification and habits of venomous snakes of the world, $9 postpaid; *Field Guide to the Snakes of South Vietnam* by Simon Campden Main, $10 postpaid; *Batrachia of North America* by E. D. Cope, $16 postpaid; *Laboratory Anatomy of the Iguana* by J. C. Oldham and H. M. Smith, $17 postpaid; *Time of the Turtle* by J. Rudloe, $5 postpaid; *Atlas of Amphibians and Reptiles of New Zealand* by C. P. Pickard and D. R. Towns, $18 postpaid. Catalog of over 4000 herpetological titles sent free upon request. Herpetological Search Service & Exchange, 117 E. Santa Barbara Road, Lindenhurst NY 11757, (516) 957-3624.

For sale: large selection of captive born reptiles and amphibians, books and supplies. Send S.A.S. business-size envelope for complimentary price list or $5 for a 1 year subscription (bi-monthly), to Twin Cities Reptiles, 540 Winnetka Avenue North, Golden Valley MN 55427, (612) 593-0298.

Advertisements (cont'd)

For sale: reptile cages (36″ × 18″ × 18″), sliding glass doors, three left, $40 each; 30″ female coastal rosy boa, $80; 24″ male and female rosy boas, *Lichanura trivirgata myriolepis*, excellent color, $180/pair. Marc, (708) 597-6172 weekday evenings.

For sale: 12″ female red-footed tortoise (Bolivian var., see Pritchard and Trebbau's *Turtles of Venezuela*, p. 215 and Pl. 39), long-term captive, excellent health, for pick-up only, will not ship, $300. Also, wooden cage, inside dimensions 59″ × 24″ × 22″, two glass sliding doors, $30; will not sell before tortoise. John Jr., (708) 857-7929.

For sale: 26″ African savannah monitor lizard, hearty eater, $50. Wayne, (708) 599-7982.

For sale: c.b. frilled dragons (*Chlamydosaurus kingi*), yearlings 16–20″, $700 each or two for $1250. Call Dan or Phil at New York Reptilia, Inc., (718) 461-1371 (closed Mondays). Limited numbers of the following animals available soon: shingleback skinks (*Tiliqua rugosus*), blotched blue-tongue skinks (*T. scincoides nigrolutea*), New Caledonia crested geckos (*Rhacodactylus ciliatus*) **first and only ones available in the U.S.**, New Caledonia giant geckos (*R. leachianus* ssp., recently designated *R. henkeli*), diamond pythons (*Morelia s. spilota*), eastern carpet pythons (*M. s. macropsila*), green tree pythons (*M. viridis*), and New Guinea jungle carpet pythons (*M. s. variegata*). Serious inquiries only.

For sale: What are vittikins? Vittikins are bearded dragon (*Pogona vitticeps*) × Rankin's dragon (*P. brevis*) hybrids. All the personality, charm and hardiness of bearded dragons at half the size. Just $75 each. Also c.b. water dragons, $20; c.b. leopard geckos, $20. Marcia Rybak, (708) 735-8205.

For sale: bearded dragons, $75; veiled chameleons, $65; and other captive born lizards. Crickets $15/1000 postpaid. **Ray's Reptiles**, P.O. Box 4732, Lincoln NE 68504-0473. Call or fax Monday – Saturday, (402) 477-1975, eves are best. Call or write for our NEW free price list.

For sale: **baby leopard geckos**, *Eublepharis macularius*, c.b. '95, from beautiful zoo-born parents, well started on vitamin/calcium supplemented ¼″ crickets and small molted mealworms, care sheet included, GREAT PETS, $25. Call Rob at (708) 615-4388 and leave message.

For sale: c.b. Australian velvet geckos, *Oedura monilis*, hatched 1995, $95 each or will trade for *O. marmorata*. Gary Fogel, (312) 935-6938.

For sale: one pair of giant day geckos, *Phelsuma madagascariensis boehmi*, $90/pair; one male and two female Mauritius day geckos, *P. guimbeaui*, $245/trio. The above are proven breeders. Also c.b. geckos—velvet geckos, *Oedura castelnaui*, $75 each; *O. monilis*, $95 each; giant frog-eyed geckos, *Teratoscincus keyserlingi*, $95 each. Agamas too—bearded dragons, *Pogona vitticeps*, yellow phase, $75 each; one pair of dabbs, *Uromastyx ornatus*, 1½-year captives, 10–11″, very colorful, personality +, $230/pair. Philip A. Tremper, Jr., P.O. Box 264, Clintonville WI 54929, (715) 823-5873.

For sale: 3′ Nile monitor, to good home, $50 or reasonable offer. Leave message for Steve, (312) 507-9873 or (708) 342-8576.

For sale: male *Varanus indicus* (Solomon Is.), ~3′, 4-year captive, $125; adult male plumed basilisk, $65; c.b. leopard geckos, $25; c.b. *Paroedura pictus*, $35; c.b. fat-tail geckos, $40; two male 1994 Honduran milksnakes, $100 each. Bryan Elwood, (704) 665-7185 evenings.

For sale: giant green iguana, 5′, complete with 6′ habitat and multiplatform tree, very tame, paper trained, great pet. Best offer. Mike, (708) 940-0333.

For sale: female rhinoceros iguana, c.b. '93, $795; one male and one female adult Cuban rock iguanas, $1750/pair; *Uromastyx acanthinurus*, $390; *U. aegyptius*, $75; Baja blue rock lizard, c.b. '93, $85. Randy, (817) 613-1242 (6 – 9 P.M. Central Time). [TX]

For sale: rhinoceros iguanas; Cuban iguanas; green iguanas; *Geochelone sulcata*; *G. elephantopus* (Florida sales only). D. J. or Sam, (305) 680-8492. [FL]

For sale: female c.b.'94 Indonesian bluetongue skink, $95; pair of Mexican rosy boas (*Lichanura t. trivirgata*), c.b. '93, $180. Call (708) 361-5835.

For sale: 3½′ female eastern kingsnake, *Lampropeltis g. getula*, proven breeder, $35. Ralph, (708) 205-9890.

For sale: baby albino plains garter snakes (*Thamnophis radix*), beautiful, $200 each; adult male normal plains garter, $5. Scott, (919) 848-2376. [NC]

For sale: by July, some interesting hatchling northern pine snakes (*Pituophis m. melanoleucus*). The father is a 6′ New Jersey stock animal, outstanding black/white contrast (friends refer to this animal as the "bowtie" snake, because of its distinctive neck markings). The mother is a 5½′ animal from northeastern Alabama; she was quite yellow as a hatchling, but has grown into a beautiful bone-white animal with black saddles from the neck to midbody and huge black spots the rest of the body. Both are from good stock; I don't know what the hatchlings will look like but at $80/pair they're a steal. I have been getting inquiries about this union and I don't expect them to last very long, so order now. Bart Bruno, (203) 773-9257. [CT]

For sale: 1995 hatchlings. Trans-Pecos rat snakes, $35 each; Baird's rat snakes, $25 each; Mexican hognose snakes, $35 each [permit needed in IL]; western hognose snakes, $25 each [permit needed in IL]; prairie kings, $25 each; California kings, $25 each; gray-banded kingsnakes, various localities, $100 and up; *ruthveni*, $75 each; Durango mountain kings, $100 each; Mexican milksnakes, Pueblans, $50 each; red milks, $35 each; Mexican black kings, $40 each; prairie–speckled crosses, $50 each; Arizona mountain kings, $125 each. Rosy boas: *trivirgata trivirgata*, $50 each; *t. roseofusca*, $75 each; *t. saslowi*, $100 each. Steve Mitchener, 2928 Kerry Lane, Oklahoma City OK 73120, (405) 748-6566 after 6 P.M. Central Time.

For sale: from **Gaines Reptiles, Inc.** Great opportunity to purchase proven adult breeders ($375–650) – tangerine Honduran milksnakes, Durango mountain kingsnakes, Nelson's milksnakes, albino southern pines, banana–50/50–albino California kingsnakes. Also adult male 66% heterozygous ball pythons ($500) and 1994 male green tree pythons ($875). 1995 c.b. snakes now available include albino boa constrictors, anerythristic boa constrictors, Brazilian rainbow boas, spotted pythons, albino Queretaro kingsnakes, Tarahumara mountain kingsnakes, San Pedro mountain kingsnakes, Durango mountain kingsnakes, northern blue-tongue skinks, pink-tongue skinks, and other choice species for the discriminating collector and invester. To reserve animals in short supply, call (317) 878-4042 or (800) 689-3040. Mastercard & Visa accepted. For 1995-96 price list, send $2 and business-size SASE to Gaines Reptiles, Inc., c/o Bill Gaines, 6 Pine Tree Lane, Trafalgar IN 46181.

For sale: male *thayeri*, light tan with little red, gorgeous, '94 hatch, $100; female tangerine Honduran milksnake, '94 hatch, $100; 4–5′ female Colombian boa, c.b. '93, $100; male black pine snake, little or no pattern, c.b. '93, $100; female western hognose, healthy animal but lays infertile eggs, c.b. '91, $50 [permit required in IL and MO]. Also, please send for this year's price list and as always quantity pricing is available. Troy, 1954 State Road F, Fulton MO 65251, (314) 642-9422.

For sale: Attention snake enthusiasts! **Plains Reptile** is now taking orders for 1995 hatchlings. Quality snakes at attractive prices—reserve yours today. Send stamp for free price list. Plains Reptile, P.O. Box 5818, Fargo ND 58105.

For sale: expected '95—deposits accepted. Pythons—blackheads, womas, green trees, diamonds, jungle carpets, rings, bloods (red and black) and Children's. Boas—emeralds, Hog Islands, Madagascan tree (*Sanzinia*), Bolivian redtails, Argentines, Brazilian rainbows, Dumeril's and sand boas. Tortoises—Aldabras (3″–24″), Hermann's, marginateds, redfoots, leopards and others. For price list send a one-time fee of $3, which includes a '95 list (and *all* future lists) and color photos. Dick Goergen, P.O. Box 225, Alden NY 14001, (716) 681-4518.

For sale: 6½′ female boa constrictor, $150 or best offer. Tom, (312) 284-5716 evenings.

For sale: quality reptiles at great prices. Female Colombian rainbow boa, c.b. '91, breeder, $150; one male c.b. '94 and one female c.b. '91 Colombian rainbow boas, $235/pair; 5′ male Brazilian rainbow boa, c.b. '92, $290; female hetero striped corn, c.h. '89, breeder, $65; and many more. Send stamp for 1995 list. Plains Reptile, P.O. Box 5818, Fargo ND 58105 or e-mail at mjberke@badlands.nodak.edu for lists or questions.

Advertisements (cont'd)

For sale: large female c.b. '90 boa constrictor, beautiful 8′+, heavy, healthy, excellent quality, brick-red tail; and one c.b. male boa constrictor, 8′, healthy, tame. Both boas and large custom tank, $275. Jim, (708) 566-6523.

For sale: 10′ Burmese python with attractive homemade wood tank, 6′ long, 3½′ high in back, 3′ high in front and 2′ deep, two frame windows with fine-mesh steel screen, entire top opens, $300. (815) 933-8279.

For sale: green tree pythons, January and April 1995 hatchlings from three different blood lines. Well started on frozen pinky mice.

For sale: **green tree pythons**. Another spectacular year of the finest available anywhere—c.b.b. 1995 babies are well established, having shed several times, and guaranteed feeding on their own. Largest selection of distinct bloodlines, many different color phases and genetic lineages available, $750 each, $700 apiece for two or more. **Limited** numbers of keeper selects from new bloodlines, $850–900 each. Other species of pythons, boas and colubrids available. Eugene Bessette, (904) 495-3075. [Archer FL]

For sale: **Brazilian rainbow boas** expected from beautiful orange parents, $250. Send stamp for info/photo. Scott Schuett, 1820 Bigelow, Toledo OH 43613.

For sale: c.b.&b. (May '95) Colombian rainbow boas, $50 each. Gary, (708) 837-4475 after 6:00 P.M.

For sale: anticipated '95 offspring. Argentine, Hogg Island, *amarali*, Mexican, nw Peruvian, Crawl Cay, Amazon Basin Colombian, *nebulosus*, Dumeril's, Borneo bloods (available now), black bloods. Call or write for price list. Tim or Janice Mead, RR5, Box 130A-1, Greenville TX 75402, (903) 454-1312.

For sale: captive-bred snakes. Blood pythons, Burmese pythons, Kenyan sand boas, bull snakes. Will deliver in Chicago metro area or ship from O'Hare Airport. Joan Moore, (312) 528-4631.

For sale or trade: one male and one female beautiful 5-year-old, Iquitos-locality, Peruvian red-tail boas, 6½–7½′, unrelated, $1200/pair; one male and one female 3-year-old Pucallpa-locality Peruvian red-tail boas, 5–6′, unrelated, $1000/pair; one male and one female anerythristic Colombian boas, c.b. 5/95, unrelated to any U.S. stock, outrageous, $500/pair; one male and one female Indian pythons, c.b. 6/94, $400/pair [CA sales only]; two male and two female Colombian boas, hetero for "new" anerythristic bloodline, c.b. 5/95, $125 each; one male and one female Tanimbar Island blue-tongue skinks, c.b. '95, unrelated, $450/pair; seven baby fire skinks, c.b. '95, $40 each. Charles, (805) 388-4987.

Free!!! NATION'S LARGEST CATALOG of reptile and amphibian supplies at the guaranteed lowest prices. Big Apple Herpetological's 48-page catalog includes incubators, cages, heating, digital thermostats & themometers, lighting, cage accessories, husbandry & feeding/dosing equipment, medications, vitamins, foods, herp shirts and books. We also sell a large variety of reptiles. For FREE catalogs and product orders: (800) 666-6672. For product information: (212) 799-9065. For reptile information and sales: (212) 799-5231. Visa, MasterCard, Discover accepted. BIG APPLE HERPETOLOGICAL, P.O. Box 632, New York NY 10023.

Opportunity for animal and house sitting in Washington DC: Would you like two weeks this summer to explore the nation's capital, from a free home base in the suburbs, including fine reptiles? Then this offer is for you. Our house is near public transportation, with easy access to museums, the zoo, and several universities. Home duties are daily feeding of four fish (glass catfish and angelfish), feeding a pancake tortoise every other day, and twice-daily checking and cleaning up after two reticulated pythons (not feeding them). Interested? Call Kathy at (202) 857-3265.

Pet-sitting service: Complete in-home pet and plant care, specializing in reptiles and other unique pets. Dogs and cats welcome with open arms, midday dog walking. Experienced and dependable service by devoted animal lovers, serving Chicago and suburbs, reasonable prices, fully insured and bonded. Ask about our habitat consultation and custom-made cages. Exotics & More, (312) 728-5457 or page us at (708) 750-3688.

Photo opportunity: semiprofessional photographer and CHS member looking for herps for use as photography subjects. Will shoot at your location and provide copies of all images. Can be either scientific or artistic. Especially interested in venomous species with valid permits. For more details, call (708) 595-0456.

Software: **TRACS**™—Total Reptile and Amphibian Control System. The most complete database and reporting solution for automating your breeding records. Perfect for hobbyists, commercial breeders and institutions. Only $129. IBM PCs and compatibles. For more information or ordering contact Marcia Rybak at Leapin' Lizards, 736 N. Western Avenue, #315, Lake Forest IL 60045, (708) 735-8205 phone or (708) 735-8206 fax.

Tours: Five-day South Carolina herp and fossil tours, April–November 1995. Mini expeditions in search of 30-million-year-old turtles and crocodilians; living reptile hunts (vipers, king and rat snakes, turtles, anoles, broadhead and five-lined skinks, treefrogs and other amphibians), exotic reptile shopping and camping in a black water swamp forest. Finest Charleston hotels beginning and end of each tour. Twelve people per tour. Family plans available. $489. For reservations call Steve Faust, (800) 894-TOUR.

Tours: Custom-designed tours to Costa Rica, Panama, Belize and Guatemala. Expeditions to fit the specialized needs of herpers, photographers, educators, writers, professionals in search of data, and travelers just interested in visiting these countries (with or without their families). From $649. Steve Faust, (800) 894-TOUR.

Tours: **Road-riding in Costa Rica!** Treat yourself to the trip of a lifetime! Learn about tropical herps, find them, photograph them, see where they live. **Greentracks, Inc.**, offers the best herpetological tours led by internationally acclaimed herpetologists and herpetoculturists. See the Amazon, visit cloud forests, experience the world's greatest rainforest, super sunsets and good company. Call (800) 9-MONKEY.

Tours: Limited bookings available for guided tours of herpetological collection sites in Nevada. Call or fax (702) 471-0240 for reservations. For a brochure send SASE to: CRC, P.O. Box 0731, Las Vegas NV 89125-0731.

Wanted: *Reptile & Amphibian Magazine* Nov/Dec 1989 and *Vivarium* Volume 2, Number 5. Robert J. Paluch, 3303 S. Aberdeen Street, Chicago IL 60608, (312) 927-8617 tel or (312) 927-8618.

Wanted: captive reptile breeders for the Texas International Reptile Trade Show, July 29–30, 9 A.M. – 5 P.M. both days, Howard Johnson Hotel, Irving TX. Call Dr. Brian Kimball, Upscale Reptile, (214) 256-3098.

Wanted: adult Indian star tortoises. Will buy or trade. Also, albino or leucistic terrestrial turtles, box turtles or tortoises. Finder's reward. R. J. Brown, 4934 Bay Way Drive, Tampa FL 33629, (813) 286-0643.

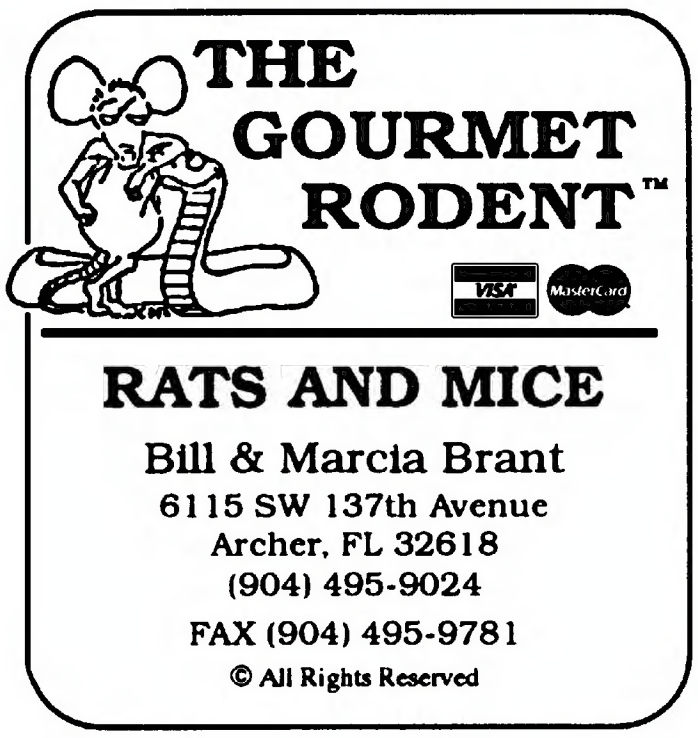
Wanted: *Uromastyx acanthinurus*. (817) 613-1242 (6 – 9 P.M. Central Time). [TX]

Wanted: brilliant yellow *Lampropeltis getula "brooksi"*, *L. g. sticticeps*, 85% yellow or more banana *L. g. californiae*, 60% white or more desert phase *L. g. californiae*, high yellow examples of *L. g. holbrooki*, red/orange and black *L. g. goini*, and black & white specimens of *L. g. goini* such as the animal pictured on plate 590 in the Audubon Society field guide. Will pay cash or trade my quality *Lampropeltis getula* ssp. hatchlings for the animals I want. Kirk Setser, 414 Wickham Road, Manhattan KS 66502, (913) 537-9449.

Wanted: styrofoam boxes, any size or shape so long as they're not flimsy, preferably with cardboard liners, willing to pay from $2 to $5. Bring to CHS meetings. Scott J. Michaels, D.V.M, Serpent City, (815) 363-0290.

Advertisements (cont'd)

Line ads in this publication are run free for CHS members — $2 per line for nonmembers. Any ad may be refused at the discretion of the Editor. Submit ads to: Michael Dloogatch, 6048 N. Lawndale Avenue, Chicago IL 60659, (312) 588-0728 evening telephone or (312) 782-2868 fax.



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In Memoriam

It is with regret that we inform you of the passing of a staunch supporter of the Chicago Herpetological Society and a lifelong member of the herpetological community. Donald W. Sellers, M.D., died Sunday, May 14, 1995, at 12:40 A.M. He was 66 years old.

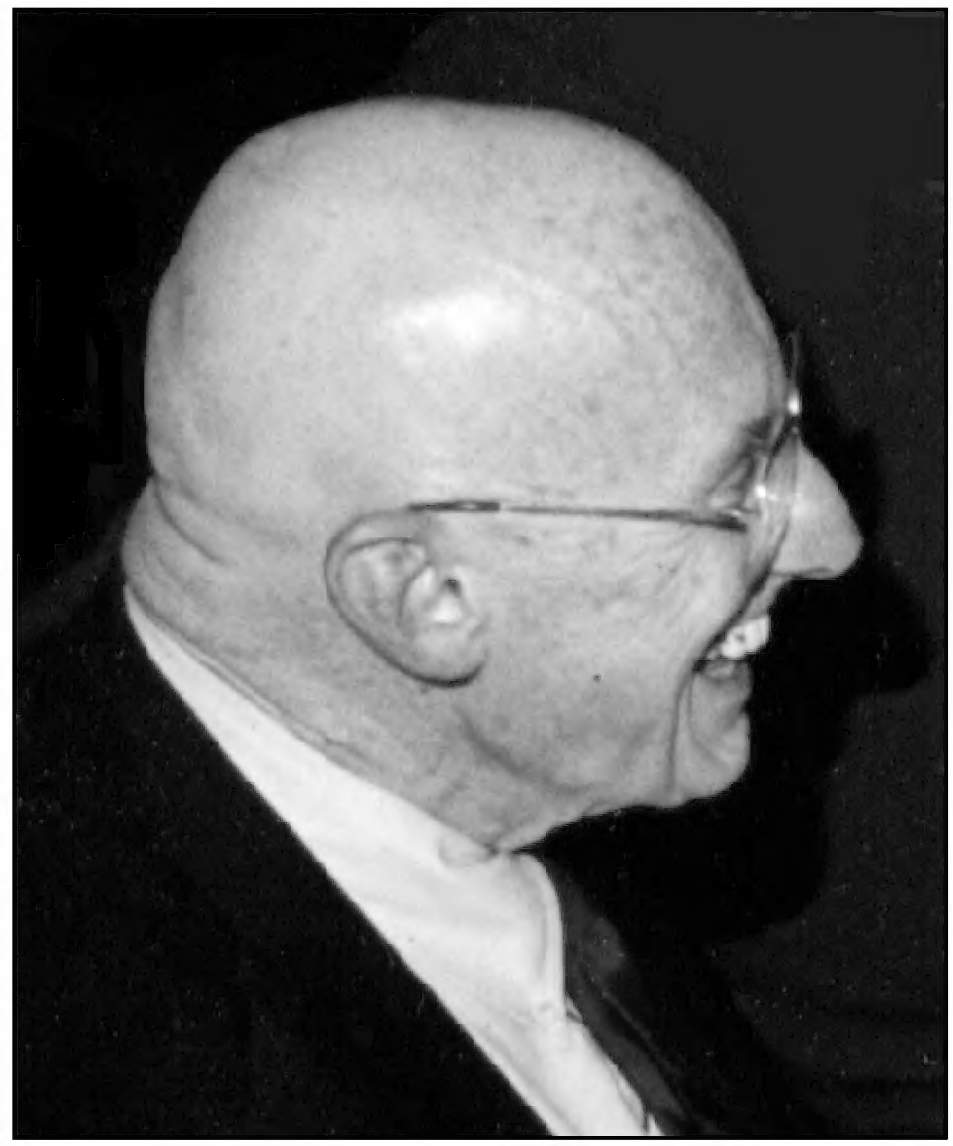
At ease and accepted by his peers in the scientific and medical realm, he was equally at home with the "good old boys" from rural America. As a trusted companion in the field collecting herps, there was none better nor more reliable. He developed his interest in snakes while growing up in west-central Texas and eventually collected and preserved representatives of each species in his area, which he exchanged for textbooks in his first year of medical school.

To those privileged to have known him, he was a man of total integrity, dependability, outstanding intelligence and intellectual curiosity, great sense of humor (even while suffering great pain in his five-plus years of battling cancer), freedom from superstition, and love of life and all humanity.

Don had a value-added life, healing sick bodies and minds. He was a man of "true grit" during his terminal illness, never complaining and making his hospital rounds to see his patients when others would have given up. A man of great courage and strength.

He was preceded in death by his wife Carolyn two months earlier.

To all who knew him as a friend, his memory will be cherished and his presence sorely missed.



Photograph by Branden Sellers

News and Announcements

THE CARE AND USE OF FISH, AMPHIBIANS AND REPTILES IN RESEARCH

On September 28–29, 1995, the Scientists Center for Animal Welfare and the Canadian Council on Animal Care will sponsor a conference on "The Care and Use of Fish, Amphibians and Reptiles in Research." The two-day conference will be held at the Royal York Hotel in Toronto, Canada. Researchers, regulatory personnel, members of animal care and use committees, administrators, veterinarians, animal care staff and others interested in these issues are encouraged to attend. Before August 25 general registration is $250 and student registration is $50. For a program and conference registration form write to: Conferences, Scientists Center for Animal Welfare, 7833 Walker Drive, Suite 340, Greenbelt MD 20770.

INTERNATIONAL REPTILE BREEDERS CONVENTION IN SAN DIEGO

The International Reptile Breeders Convention will take place July 15–16, 1995, at the San Diego Concourse Plaza Hall (3rd & B streets). Billed as the largest event of its kind on the West Coast, attendence usually tops 5000. World class herpetologists will be speaking, including David Barker. Admissions: adults $7.50, 2-day pass $12; under 10 yrs. $4.50, 2-day pass $7. Contact: David Good, IRBA, P.O. Box 85152-279, San Diego CA 92186, (619) 449-9494.

GREENTRACKS AMAZON EXPEDITION

Herpetologist and CHS member Terry Vandeventer will lead an expedition to the Amazon River for Greentracks, Inc., 12–19 August (with optional second week). For information contact Greentracks at (800) 9-MONKEY.

UPCOMING MEETINGS

The next meeting of the Chicago Herpetological Society will be held at 7:30 P.M., Wednesday, June 28, at the Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, in Chicago. This is our annual Show & Tell meeting. All members are encouraged to bring a favorite animal and a cage or container in which to display it. Also, any members so inclined are welcome to come up on stage and tell us something about the animals they have brought.

We are required to use the entrance on the west side of the museum. We have permission to use the staff parking lot to the west of the museum. Entrance to this lot is from McFetridge Drive, the wide street just to the south, between the museum and Soldier Field. There is also free parking available in the lot to the north of the museum. The #146 CTA bus goes directly to the museum. Unfortunately, it does not operate after 9:00 P.M. However, after the program anyone needing a ride to a CTA stop will have no trouble finding one—just ask any board member.

Turtle Club

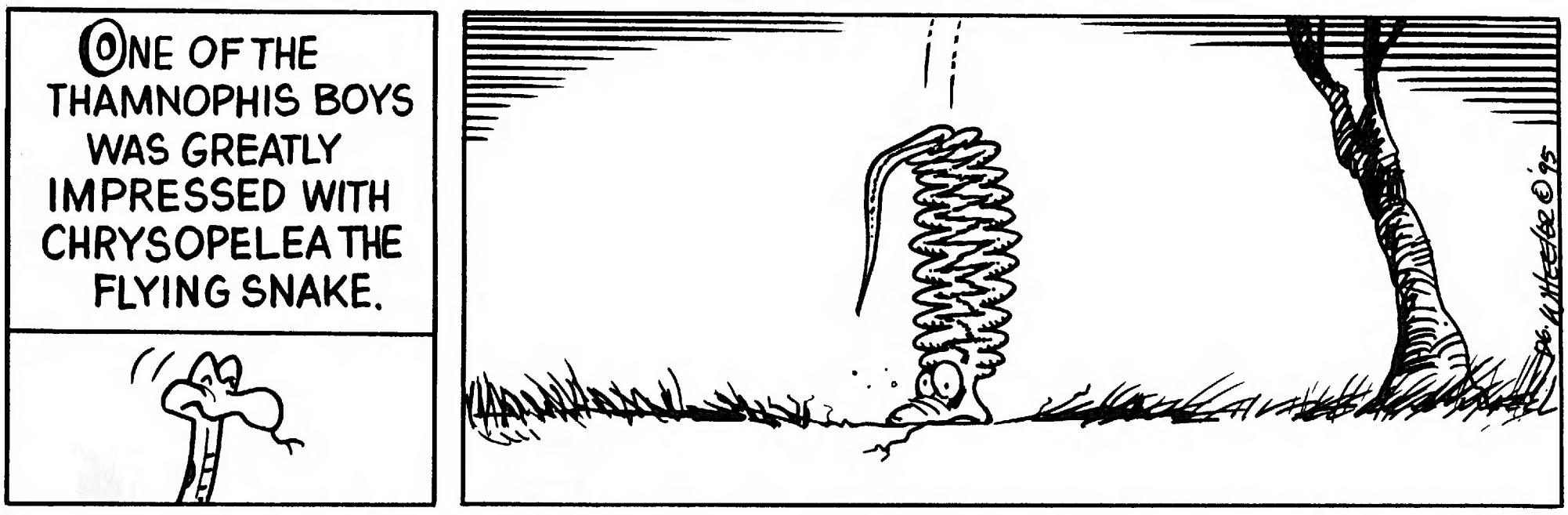
Due to scheduling problems, meetings of the Chicago Turtle Club have been suspended for June, July and August. Turtle Club members will be sent notices when the meetings resume and an announcement will appear in the *Bulletin*.

DONATIONS TO THE APRIL 26 RAFFLE

The following is a listing of those individuals and businesses who generously donated items for our monthly raffle at the April 26 meeting. The donated items are shown in parentheses.

Ghann's Cricket Farm (cricket food); Reptile News Press (*Guide to the Reptile Body*, snake mug); Tetra Terrafauna (Repto-Heal, iguana poster); Valentine Equipment (rheostat); ZooMed (Reptivite, box turtle food, rock heater); Rep-Cal (Rep-Cal, T-shirt); Advanced Vivarium Systems (*Understanding Reptile Parasites*); Fancy Publications (subscription to *Reptiles*); Brian Jones (*Reptiles* magazines, terrarium backdrops, Vita-lites and feeding dishes); Marcia Rybak (frog pin and earrings); Fluker's Cricket Farm (tortoise food); Terrarium Art (rock pool and cave); Mardel Labs (Formula V/M/A); Karen Furnweger (*Aquaticus* Magazine); Wardleys (Reptile 10); Big Apple Herp Supply (Pearlco heat bulb); Gery Herrmann (wooden frogs); Ilene Sievert (earthworms).

THE ADVENTURES OF SPOT



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